JUL 26 1926

PAPER TRADE JOURNAL

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GRIFFITH-HOPE CO. 27 ERIE ST. MILWAUKEE

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PAPER TRADE JOURNAL
ESTABLISHED 1872

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY AND THE PIONEER PUBLICATION IN ITS FIELD

FIFTY-FIFTH YEAR

Published Every Thursday by the
LOCKWOOD TRADE JOURNAL CO., Inc.

LESLIE R. PALMER, President — GEO. S. MACDONALD, Vice-President & Treas. — F. K. HOPPIE, Secretary

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THE management of the Cherry River Paper Company welcomed the introduction of Liquid Chlorine by EBG as a forward step in bleaching. A comparison of the advantages of this chemical over old bleaching methods clearly established the superiority of Liquid Chlorine.

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ESTABLISHED IN 1872

PAPER TRADE JOURNAL

With Which Is Combined

Vol. LXXXIII, No. 4

The Magazine of the Paper Industry

Thursday, July 22, 1926

Kimberly-Clark Plant to be Ready by Fall

Construction of Five-Story Factory and Warehouse for Cellu-Cotton Products Co., of Neenah, Wis., a Subsidiary, Required to Cope With Rapid Growth of Sanitary Products Industry —Building is Third Large Structure Erected by Company in Two Years— Dental Specialties Being Developed for Market at Present Time

[FROM OUR REGULAR CORRESPONDENT]

APPLETON, Wis., July 16, 1926.—So rapid has been the growth of the Cellu-Cotton Products Company, of Neenah, Wis., a subsidiary of the Kimberly-Clark Company, that construction work has been started on the second five-story factory and warehouse within a year. Building work will be rushed through by C. R. Meyer & Sons Company, contractors, so that the structure will be ready for use in the fall.

An old knitting factory occupied by the Cellu-cotton industry is being razed to make way for the new factory, which will adjoin the present buildings. The size will be 80 feet by 142 feet, with 70,000 square feet of floor space in the five stories and basement. Brick, steel and concrete will be used.

The new building will be the third large structure to be erected by the Kimberly-Clark Company in the last two years. The first was a five-story building used for laboratories, storage, development and experimental plants. The second was the five-story plant finished last fall for the Cellu-Cotton Products Company. The Cellu-Cotton industry was organized eight years ago for the manufacture of sanitary products and has expanded rapidly. A line of dental products is being developed for the market at the present time.

New Warehouse for Bergstrom Paper Co.

Construction of a large new warehouse has been started by the Bergstrom Paper Company, of Neenah, Wis., immediately south of its principal mill. The building will be five stories high, of concrete and steel, with brick facing. It will be 80 by 150 feet in size, and provides 60,000 feet of floor space which is to be used largely for storage. The company will occupy the new unit early in the fall.

Rufus Bishop Executive of New Seattle Mill

Rufus Bishop, of Neenah, Wis., is vice-president, and will be one of the active executives of a new paper mill being established at Seattle, Wash. The concern will be called the Occident Paper and Pulp Mills, Inc., and involves investment of about half a million dollars. The plant will be at Edmundton, Wash., and the general offices at Seattle. Capacity of the mill will be 40 to 50 tons of pulp daily.

Compensation Cases Up for Decision

Whether the John Strange Paper Company, of Neenah, Wis., must pay compensation for an injury growing out of an assault on the mill premises is one of the cases up for decision before the Wisconsin Industrial Commission. At a hearing conducted at the court house at Appleton, Wis., John Tews, Sr., an employee of the Strange plant, alleges that he had nine teeth knocked out when he was struck by a wrench alleged to have been in hands of a fellow-employee. The company made no denial of the injury.

Other compensation cases involving paper mills which were taken up at the hearings were: Anton Wydeven vs. Combined Locks Paper Company, Appleton, plaintiff alleging a kick by a fellow workman caused a permanent disability to one foot; Martin Hall vs. Bergstrom Paper Company, Neenah, Wis., involving claim because of permanent partial disability caused by an injury to the hand in a paper machine; Anna Dreger vs. Tuttle Press Company, Appleton, claiming injury to her spine when she fell at the plant. Arthur Kessler vs. Combined Locks Paper Company, alleging hernia caused by a blow from a falling dryer spear. A settlement was reached after the hearing in the Dreger-Tuttle Press case.

Progress at New Port Arthur Mill

Construction work is proceeding steadily on the new mill at Port Arthur, Ont., under erection by the Consolidated Water Power and Paper Company, of Wisconsin Rapids, Wis. The walls for the finishing and machine rooms have been started and concrete is being poured for the floors. A conveyor reaching 885 feet out into the lake is the means of bringing building material from barges to the building site.

Menasha Sales Force to Convene

Menasha Printing and Carton Company, Menasha, Wis., will hold the annual convention of its sales force July 29, 30, and 31. One day will be devoted to a visit to the company's plant at Wausau, Wis., and the Marathon Paper Company's mill at Rothchild, Wis. Two days will be devoted to business discussion and fellowship dinners. About 30 men are expected to attend.

A. N. Strange Returns to Duty

A. N. Strange, of Neenah, Wis., president of the Wolf River Paper and Fiber Company, of Shawano, Wis., is able to be about his duties again after confinement for some time with internal injuries suffered in a recent automobile collision at Appleton, Wis.

Fox River Valley Mills Busy

That mills of the Fox River Valley are enjoying a good run of business is shown by a check up of employment conditions. Jobs in paper mills are scarce among the unemployed, with no immediate prospect of a let up. Mills are receiving applications from workmen at the rate of 25 a day.

Imperial Has Sidetrack Problem

The Imperial Paper Products Company, a new concern at Neenah, Wis., is having trouble obtaining needed sidetrack facilities, due to protests of home owners who object to the construction of a track passing their property. Difficulties are expected to be ironed out by calling the city council, the taxpayers, and the company officials into a joint conference soon.

Los Angeles Demand Satisfactory For Season

Trade is Comparatively Better Than a Month Ago—Demand is Most Satisfactory for Grades of Fine Paper—Competition in Coarse Grades Continues Rather Keen—J. A. Kelly Is Made Manager of Sales of the Sierra Paper Co.—General Trade News.

[FROM OUR REGULAR CORRESPONDENT]

LOS ANGELES, Cal., July 16.—Contrary to the expectations of everyone in the paper trade, and likewise contrary to annual experience during the past, the present demand for paper keeps up better than it was during the corresponding period of last year, and is even in excess of what it was during the month of June. Of course, it is not throwing any bouquets at trade when the demand for July, 1926, is reported to be better than it was during July, 1925, was distinctly below normal for the season of the year. But it is a remarkable and surprising fact for trade during the month of July in any year to be in excess of what it had been in the preceding month of June. It has been almost the invariable experience of the paper houses here that the demand slumped off about June 20 and that it was likely to stay at a low ebb thereafter until about September 1. But this year trade is presenting a notable and most gratifying exception to the rule.

Fine Papers Most Active

Present demand is manifesting itself principally on grades of fine papers. Printers all through Southern California appear to be busy and in consequence are buying liberally of grades such as are adapted to their needs. There are no present indications that these favorable conditions will change any time within the near future.

Coarse Paper Demand Somewhat Slow

Trade on coarser papers is somewhat slow in comparison with that on the finer grades. One reason for this is that these grades must vie in a far more competitive market than do the finer grades, due primarily to the fact that the Los Angeles district is flooded with brokers, most of whom are after trade on the coarse grades. In as much as these do business with little or no overhead, at least in comparison with the overhead encountered by the regular paper jobbers, that they are enabled to sell their products at a price so low that the regular jobbers, if they compete at all, must do so at a meagre profit. However, not to be outdone by these brokers, the regular dealers have to forget the lowness of the quotations they are called upon to meet and have to fight fire with fire.

About the only advantage the paper jobbers have over the brokers on coarse papers is the ability to make quick deliveries. Most of the former at all times carry a good stock and a wide variety of papers and deliveries on emergency calls can be made almost immediately. This in contrast to the waits involved when the broker has to order from his mid-western connections and defer deliveries while the order is crossing half the continent. Many of the users of coarse papers appreciate this fact and prefer to confine their business to local jobbers, but others are attracted by the low quantity prices available from the brokers and buy far enough in advance to counterbalance the time spent in waiting for final delivery.

Sierra Paper Co. Issues New Price Book

The Sierra Paper Company, 130 South Los Angeles street, calls attention to its new price book. This is of pocket size, with loose leaves, and is more completely indexed than usually is the case with such manuals. It lists and prices every line of paper carried by the Butler institutions.

Changes in Sierra Paper Co.

Thomas A. O'Keefe, who until July 1 last had been manager of sales in the fine paper department for the Sierra Paper Company, was, on that date, promoted to the position of assistant to General Manager George I. Tompkins. J. A. Kelly, who, until this change in executives became effective, had been manager of sales in the coarse paper department, now has assumed the position of manager of sales for the whole institution. Both Mr. O'Keefe and Mr. Kelly are experienced paper men and both are abundantly qualified to meet successfully the added duties laid upon them.

General News of the Trade

James B. Steenbock, representing the Cromwell Paper Company of Chicago, accompanied by Mrs. Steenbock, is a guest at the Ambassador Hotel, Los Angeles. Mr. Steenbock is making one of his periodical visits to the Pacific Coast and this time is combining business with pleasure. Enroute here from Chicago he stopped at various of the leading trade centers and reports business conditions good wherever he has been.

George I. Tompkins, general manager for the Sierra Paper Company, just has returned from a two months' sojourn in Texas. While there he visited and inspected the Butler institutions maintained at Dallas, Fort Worth, Houston and Galveston.

T. M. Denison, sales manager in the fine paper department for Blake, Moffitt & Towne, 242 South Los Angeles street, spent a week early this month in San Francisco. He went up there as one of the delegation sent north by the Los Angeles Ad Club.

R. H. Erlandson, of Blake, Moffitt & Towne, recently made a trip through the extreme southern part of California. He reports business conditions satisfactory in that part of the state and says he does not look for any change for an indefinite time to come.

Plant for Rayon Pulp Production

VANCOUVER, B. C., July 14, 1926.—Big developments in the way of plant extension and production of rayon pulp may be expected soon by the B. C. Pulp and Paper Company, formerly the Whalen Pulp and Paper Company.

The new management has been carrying on chemical research for some time in the utilization of hemlock for the production of cellulose and certain results and conclusions have been reached which, it is stated, may determine the company to proceed with installation of new plant for the manufacture of this sort of pulp.

Lawrence Killam, the executive head of the new company, left recently for one of the company's properties. At present the two plants at Woodfibre and Port Alice are operating in the production of pulp, turning out about 200 tons a day. The Swanson Bay plant is not in full use. For several years the Port Alice plant has been regarded as the one where the biggest developments would take place.

"Our idea is to expand our mills to manufacture rayon pulp," said Mr. Killam. "As an operating concern we are able to make a very close study of results and certain effects. No orders have, so far, been placed for new machinery, but we expect within a few weeks to make an announcement in regard to our immediate expansion plans."

The end of April marked the conclusion of the first six months of the career of the B. C. Pulp and Paper Company. Satisfactory progress has been made and the working capital position has been improved since its organization. Both in volume and in price the business done during those six months has been well in line with the predictions made in the fall by those prominently connected with the new organization.

The April statement shows a surplus balance to March 31 of $150,193 and a net profit for the month of April, after providing for interest and bonds, but not depreciation, of $58,124.

Raw Materials of Proven Reliability

MATHIESON Chemicals

Liquid Chlorine
Bleaching Powder
Caustic Soda
Solid-Flake-
Ground-Liquid
Soda Ash
Aqua Ammonia—26°

THE manufacturer with a good name to uphold safeguards his product by purchasing only raw materials of proven reliability.

True buying economy subordinates price to a far more important consideration — the reputation of the supplier for consistent fulfillment of all quality and delivery agreements.

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PHILADELPHIA CHICAGO FAIRMONT, W.VA. PROVIDENCE CHARLOTTE

Caustic Soda - Liquid Chlorine
Bicarbonate of Soda
Anhydrous Ammonia

Soda Ash - Bleaching Powder
Modified Virginia Soda
Aqua Ammonia

Deal Direct with the Manufacturer

Uniform Materials Make Uniform Products

Toronto Paper Trade Becomes Active in Spots

Market Fluctuations Attributed to Growth of Week-End Holiday Habit—Brisk Demand Experienced for Tissues and Summer Specialties—Paper Stock Situation Little Changed—Big Request for Paper Flour Sacks, Which are Displacing Cotton Bags.

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ont., July 19, 1926.—Business in the paper line is active in spots and jobbers report that since the advent of the holiday season they are exceptionally busy for about three days each week, with the remainder quiet. This state of affairs is attributed to the number of printers and consumers who are taking week-end holidays from their places of business. Mills continues busy and, in certain lines of paper, there is a brisk demand, particularly in tissues, luncheon sets and picnic supplies, the department stores reporting a big call for these goods. A meeting of the light wrapping paper section of the Canadian Pulp and Paper Association was held in Montreal last week and all the members reported business as being very active for this season of the year.

In the rag and paper stock division there is no change in the situation. Collections have been falling off owing to the holiday period. There is a fair call from the mills for waste paper. Requisitions for rags are only moderate and prices in some lines are nominal. Cotton rags are piling up in the hands of the distributors and buying is confined to a few specialties. There is a big demand for paper flour sacks from the flour mills of Canada and paper bags are replacing cotton ones gradually. While there is considerable competition from American sources, Canadian plants have been steadily increasing their equipment to meet it, by the addition of four color presses.

Fraser Companies Open Toronto Office

The Fraser Companies, Edmundston, N. B., large pulp and paper manufacturers, have opened an office at Room 44, in the Commonwealth Building, King street east, Toronto. T. H. McDermott who for 25 years was associated with the Lincoln Paper Mills, Merritton, and has had a wide experience in the paper line, is handling the sales of the Fraser Companies in Toronto and throughout the province in kraft, manila, fibre and box boards.

Paper Company Hold Picnic

The annual picnic of the staff of the Wilkinson Paper Company, Toronto, was held recently by steamer Cayuga to Victoria Park, Niagara Falls, Ont. There was a lively baseball match, after which sports of various kinds were enjoyed. Several members of the party visited the power house at the Upper Falls through the courtesy of the Hydro Electric Power Commission and the remainder of the day was spent in sight seeing.

Strathcona Paper Co. Is Busy

The Strathcona Paper Company, Strathcona, Ont., report at the present time that they are running their two machines to capacity on sheathing paper, and on light chip and regular grades of board. The company have recently added a new beater and made other improvements to the plant and will increase the capacity from 600 tons to 800 tons monthly. A new building is being erected over the waste platform, 65 x 120 feet, 12 feet high, which will be used for storing raw stock. Unless something unforeseen occurs this year, the business of the company will be the best in the history of the organization.

Much Attractive Publicity

The United Paper Mills, Toronto and Hamilton, are sending out to the trade neat samples of locarn cover paper, which comes in white and eleven colors. Some excellent color designs are shown on the samples for which a good demand is reported.

The Fred W. Halls Paper Company, Toronto, have issued a large 130-page sample book with double cover in Parkdale scarlet, ripple finish. Full lines of book, bond, text, coated (in colors and white) litho, offset, tag, manila, and other ranges are shown. The book is conveniently indexed and is admirably made up. Another novelty by the same firm is a small vest pocket size calculator showing book paper weights. The calculator gives the accurate weight of any standard size paper based on the bond paper size of 17 x 22 and the book paper size of 25 x 38, both of which are the standard base sizes for all of North America.

Pulpwood Cutters Want Change

At the recent annual meeting of the Lumbermen's Safety Association which was held in Ottawa, it was explained that at a gathering held at Port Arthur, Ont., some time ago, an application had been received from straight pulpwood operators in the Port Arthur district that they should be transferred from Class 1 to Class 2, it being the opinion of these straight pulpwood operators who are not taking out any logs for lumber, that they were being discriminated against, inasmuch as straight pulpwood operators who were cutting on paper companies' limits have been taken out of Class 1 and put in Class 2. Pulpwood operators who are cutting on their own limits, leased lands or Crown lands, are still in Class 1 and paying a higher rate of assessments.

The Canadian Lumbermen's Association, on behalf of these pulpwood operators, made an arrangement with the Workmen's Compensation Board whereby a committee of these operators would be given the opportunity of presenting their views to the Board. Since this arrangement has been made nothing has been heard on the subject but it is likely something will develop in the near future.

Gets Damages for Loss of Scow

For the loss of his scow and loader when in charge of the Dominion Towing and Salvage Company, Charles W. Cox, of Port Arthur, Ont., pulpwood contractor, was awarded $5,494 by Justice Kelly, of Toronto. The towing company was engaged to tow a scow and pulpwood loader from Grand Marais to Vigeon Bay, a distance of 65 miles, on the north of Lake Superior. The night was so dark that the tow could not be seen from the tug and the scow and loader sank on account of a speed of seven miles set by the tug.

Notes and Jottings of the Industry

C. E. French, of the sales staff of the Howard Smith Paper Mills, Toronto, has returned after spending his holidays in the Muskoka district.

A. J. Bailey, vice president of the Thompson and Heyland Company, Toronto, is enjoying a month's holiday at Wasaga Beach on Georgian Gay.

George A. Hayward, of the staff of the Canada Paper Company, Toronto, was married last week to Miss Grace Lee, of Toronto, and was presented by his fellow employees with a case of cutlery and cut glass.

George Barber, late of the Great Lakes Paper Company, Toronto, has been appointed assistant secretary of the Spruce Falls Power and Paper Company, Toronto, and has entered upon his new duties.

H. J. Shanley, of the Chemical Paper Manufacturing Company, Holyoke, Mass., was a recent caller upon the trade in Toronto.

H. G. French, of the United Paper Mills, Toronto, and family,

(*Continued on page 70*)

You Want

—a doctor that hugs every inch of the roll regardless of length, temperature or vibration.

—a doctor that will not score.

—a doctor that maintains exactly the right pressure without attention or adjustment.

—a doctor that exerts no appreciable braking action on calenders or dryers.

—a doctor with a blade that can be renewed in a minute without stopping the machine or requiring fitting or adjusting.

The Vickery Doctor

Paper makers like you have been quick to recognize the money-saving possibilities of this ideal doctor. It is rapidly becoming standard equipment on dryers as well as calenders.

Convince yourself that it's the doctor you want. Let us send you one for thirty days' free trial.

9270

BIRD MACHINE COMPANY **BIRD** SOUTH WALPOLE, MASS.

MACHINERY

Normal Summer Trading Rules in Philadelphia

Brisk Demand Experienced for Seasonal Specialties, Due to Warmer Weather—Prices of Practically All Grades of Fine and Coarse Paper Being Well Maintained—Bright Outlook for Autumn—Political Campaigns Will Stimulate Consumption of Paper

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., July 19, 1926.—While the demand for paper has drifted into a normal summer trading of limited proportions there are many indications of brighter days with the coming Fall season. In comparing the present condition with last year, dealers find that prices and orders are on a parity with the same period of 1925. While looking ahead to brisker business with the advent of autumn, dealers are taking every precaution to guard against over-stocking and to keep present paper orders down to a minimum. There has been a resumption of conservative confidence while operations assume the normal summer speed. Prices of all grades of both fine and coarse papers are holding firmly.

Paper Men Predict Brisk Fall Business

While awaiting the passing of the summer vacation days and the slower moving paper markets, dealers are meditating on the Fall prospects and judging their trend from present indications of paper trading. It is customary that price concessions are forthcoming in the early July days. This year no wavering in quotations were noted and having passed the mid July period without inroads on values, dealers look forward to a firmer paper market with the coming Fall. The cautiousness in regrading stocking is also indicative of livelier demand to meet the needed autumn requirements which always broaden with the resumption of activities in the general industrial world shortly after the passing of Labor Day. Very few new lines are being added to those already carried by the dealers as part of the attitude of cautiousness. Another factor which the dealers believe will have a stimulation on paper consumption is that this Fall well be a lively political one, with the various State and Municipal elections at hand, and the preparation for the coming Presidential campaign, which will be effective in the coming year.

Coarse Papers Seasonally Active

While wrapping papers and the standard coarse grades have been declining in demand from the manufacturing industries, there is a seasonable market of broadening scope, reported to be one of the most brisk ever experienced, for specialties in sanitary products and soda fountain and ice cream requisites. Drinking cups, paper napkins, and like products, are heavily sought, although the weather has not been propitious within the past week. The few torrid days of early July made inroads upon the stocks of cups and towels in the warehouses of the dealers and while the colder rainy spell somewhat retarded the use of these sanitary requirements they still continue to move in large quantities. Toilet Tissues have been softening with the declining market and the keen competition for business among the manufacturers. Paper boards have been quoted at a slight increase, with chip now sold at $40 and news at $42.50. The volume of paper box sales is reported by the National Paper Box Manufacturers Association to be more favorable than last year.

Beck Paper Co. Compiles Attractive Paper Sampler

One of the most attractive of recent paper samplers has just been issued by the Charles Beck Paper Company, 609 Chestnut street, for its Grandee papers adapted for cover or inner page printed matter. The Grandee papers are compiled in a 12 inch size booklet form with an artistic cover design in Spanish effect, its inner leaves designed with a fan cut out showing all shades of the papers within the fan shape, and with eight colors in the full length leaves of the book with actual printed matter inserted and then with an accompanying plain sheet showing the quality of the papers. The Beck Grandee line has the texture of hand made papers, is deckle edged, can be used for pen and ink as well as platen impress against locked type, and can be used for announcements or correspondence cards as well as cover paper. It resembles antique with laid lines running the short way of the sheet.

Twine Men Offer New Lines

New twines have been recently offered to the Philadelphia trade by the travelers from manufacturing headquarters. H. V. Robinson, who represents the Westport manufacturing Company, Fall River, Mass., called on the trade with medium priced cotton wrapping twines and mop yarns, while the J. P. Johnston Company representative offered a new cable cord, jute twines and a specially made fibre cord.

Beck Machine Co. Adds New Paper Machine

A new type of machine has been added to the mechanical units manufactured under the name of the Beck Machine Company, 609 Chestnut street. The new machine provides for the cutting and folding of crepe Kraft bags. The machine cuts and folds at a speed of 80 bags per minute. The Beck Company has equipped the English wall paper manufacturing concern of Sanderson and Son with the Beck Folder, Sheeter and Cutter, these units having been installed in the plant in London within recent weeks.

Vacation Days for Paper Men

Among the local paper men who have been spending the past week in holiday recreation were Prfesident Norbert A. Considine, of the Paper House of Pennsylvania, just returned from an automobile tour in New England; Vice President Charles Megarge Levis, of Curtis & Bros., who is vacationing at his summer camp in the Adirondacks and making periodical visits to the local offices pending the wind up of the transfer of the business to the new ownership; and Arthur B. Sherrill, of Riegel & Co., Inc., who journeyed to New York to bid bon voyage to his son, Leceister Sherrill, recently graduated from Harvard University, who sailed with a party of classmates from the New England college for a six weeks tour of Europe last week.

Philadelphia Port Gains in Wood Pulp Shipments

In its semi-annual report of the business of Philadelphia Port, the Commissioners of Navigation, Alfred Lynch, statistican, calls attention to the broadening of the shipments of wood pulp through the local port during the first six months of the year. From the January 1 to June 30 there was received through this port 289,943 bales of pulp against 190,972 bales in the last half of 1925. Coastwise shipments of pulp also showed a gain. The last shipment of pulp was that received last week, when the Swedish motorship *Trolleholm*, arrived in port with 10,000 bales of dry sulphite pulp on board consigned to J. A. McCarthy. The vessel took on the cargo at Gothenberg, Svartvik, Wifstavarf and Iggesund, making a stop at Baltimore before landing here.

McDowell Paper Mills Provide for Larger Production

With the coming month the work of lengthening the wires on one of the paper machines of the McDowell Paper Mills, in Manayunk, will be completed. Through the extension of the Fourdriner Wires the machine's production will be increased by 8,000 pounds. All the units are now motorized with the General Electric Company's motors and the mills are now modernized in all details. Recent improvements supplement those which have been made during the past two years in the mills tor the purpose of bringing them up-to-date. The McDowell Mills are now equipped to produce a complete line of grease proof papers and plain and embossed glassines.

M. O. Raiguel Co. in New Quarters

The paper stock and distribution firm of M. O. Raiguel, is now installed in its new quarters at 111 N. Water street having removed from the old location at 150 N. Front street. The firm

Your Paper is Made in Your Beaters!

On some grades of stock the Dilts approved NEW TYPE Beating Engines have increased the speed of circulation more than 100% over other beaters in the same mill. And this has been done without any increase in the amount of power consumed.

It does not follow that on all grades of stock there would be 100% faster circulation, but it is self-evident that in the Dilts approved NEW TYPE Beating Engines, with their time-saving and power-saving design of tubs there would naturally be a decided increase in the speed of circulation and the power would be most economically used.

As a progressive manufacturer of paper you are interested in good beater equipment. You are giving more thought to your beater room than ever before. You have read of the Dilts approved NEW TYPE Beating Engines; probably you have seen them in operation. You must be convinced that they are an improvement over other types of beaters. You should have them in your own mill as soon as possible. "Your paper is made in your beaters."

Dilts

MACHINE WORKS, Inc. FULTON, N.Y.

EXPORT OFFICE ~15 PARK ROW~ NEW YORK CITY

has acquired larger quarters in the four story structure devoted to the storage of paper stock and new papers. The firm was obliged to relinquish its old home, occupied for many years, at Florist and 3rd street, to make way for the site of the present newly constructed Philadelphia Camden Bridge. It took temporary quarters at 150 N. Front street and was obliged to remove from that location owing to the plans to lower a portion of the building to the level of the bridge, which will take more than a year before completion.

Forest Mills To Be Sold

With the advent of August days the Forest Mills, near Newtown Square, will be disposed of by sale. The mills, owned by Elmer Garrett, and operating as the Garrett Paper Corporation, were given over to the production of sheathing papers and chip board, and were recently closed. The Forest Mills have been in Newark, Del. The new Garrett Mill is at Morgan, Pa., on the Chetser Creek, not far from Lamokin, Pa., and will be given over to the production of rope tissues. The mills formerly were flour producers and upon purchase by the present owners were converted in a paper making plant. Mr. Garrett has been identified with the manufacture of rope tissues for many years and is well equipped with a practical knowledge of the manufacture of these grades.

Fire Destroys Paper Stock

More than 2000 bales of waste paper shipped to the Container Paper Company of America were destroyed by fire last Saturday shortly after being unloaded on Pier 78, South Wharves, which are used by the concern for shipment of paper stocks, to and from this city. The paper was stored in the wharf warehouses at Delaware Avenue and Snyder Avenue shortly after being unloaded. It is believed that spontaneous combustion was responsible for the fire. The Container Company is the recently consolidated Philadelphia Paper Manufacturing Company and the Chicago Mill and Lumber truck.

Dennison's Plant in Blaze

The Philadelphia branch of the Dennison Manufacturing Company, was swept by fire late in the week. The fire started among paper goods stored in the basement of the local branch at 1007-11 Chestnut street and swept through the elevator shaft to the mezzanine floor, destroying a large quantity of fancy crepes and paper stocks in the retail store and warehouse on the premises, the fire burning for two hours or more before conquered.

The Glassine Paper Co. Exhibits

For the purpose of exploitation the various manufactured products made in the industries located at Conshohocken, near Philadelphia, The First National Bank, of that town, arranged an exposition under its roof, which included the paper products of The Glassine Paper Company, of West Conshohocken. A complete assortment of plain and embossed glassines in all colors are now being featured by that concern and were on display at the exposition in the bank, where 43 industrial exhibits of the valley town were shown.

Pusey & Jones To Settle

A decision handed down by Judge Morris, sitting in the Federal Court in Wilmington, Del., permitted the receivers of the Pusey and Jones Company, paper machinery manufacturers and ship builders, to settle the $14,000,000 suit of the United States Government against the corporation for $500,000. The order for settlement of the suit was signed by Judge Morris last Wednesday. The money will be paid by August, it was indicated, and will terminate a suit that has been pending for the past five years.

The Dixie Drinking Cup Co. To Enlarge

Word has been received by paper distributors here of the plan of the Dixie Drinking Cup Company, manufacturers of paper cups, of Easton, Pa., to further enlarge its plant, providing for the second extension in the business within the current year. An additional plant will be erected on the present site and will give 50,000 feet more of floor space. The local distributor of the Dixie Cup is the Philadelphia Paper Manufacturers Company, of which Frank A. O'Neil is president.

Cleveland Paper Demand Improves

[FROM OUR REGULAR CORRESPONDENT]

CLEVELAND, July 19, 1926.—Considering all of the principal paper houses, business has been a shade better for the first half of this year than during 1925. Some houses report less business than a year ago, others more orders.

General business outlook for the remainder of the year is better and this will naturally be reflected in the paper business. As a result the paper houses are optimistic and, practically all, predict that when the books are closed at the end of the year, a greater volume of trade will have been recorded than during 1925. In fact, some of the larger houses are ordering stocks from the mills which they have maintained at a minimum during the first half of the year, feeling certain that better trade is just ahead.

Another condition contributing to the spirit of optimism is what is believed to be the end of the building trades strike which has, for five months tied up the biggest office building campaign in the history of Cleveland, Much of this office space in course of construction has been rented and business houses contemplating moving have naturally held printing and stationery bills at the absolute minimum against the time when there will be changes in addresses. While union labor has not contributed greatly to end the strike, employers have raised a fund of $5,000,000 with which to complete work under construction by the employment of outside labor and workmen who have previously been employed on trades similar to the building trades, but inside factories are not concerned with the huge strike.

Since the greatest difficulty has been to get office spaces completed because of the painters' and glaziers' strikes, it is expected that this fund will soon bring about the completion of a large amount of new office space.

A fly in the ointment in the spirit of optimism prevailing at the paper houses, is collections which are not as good as a year ago. Jobbers are extending time on open accounts in the hope that their customers can thus weather the storm. One of the largest houses in the city reports that many notes taken off the hands of customers have gone to protest and extensions as long as one year have had to be granted.

Demand from the printing and stationery trade has been light because of the strike and, although there are a number of smaller printing houses opening up, as many have been forced to suspend at least temporarily.

Deliveries from the mills are as prompt as could be desired.

Awaiting Decision on News Print

[FROM OUR REGULAR COPRESPONDENT]

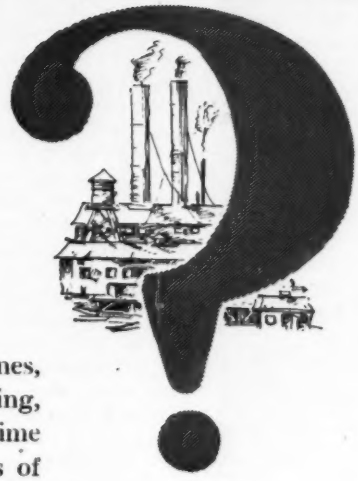
WASHINGTON, D. C., July 14, 1926.—The Department of Justice is awaiting the decision of the United States Customs Court in New York in a case involving the classification of a certain kind of printing paper which has been used by newspapers.

"The importer claimed that the paper was entitled to free entry of duty as standard news print paper," the department said.

"The contention of the government in opposition to this was that the regulations prescribed by the Secretary of the Treasury provide that standard news print paper shall consist of paper of certain dimensions, weight and finish, of unbleached sulphite and ground wood pulp. The imported paper, for which free entry is claimed, had the proper size, weight and finish, but is made of bleached sulphite and ground wood pulp. The case was vigorously contested both by the importer and by the government. The testimony of representatives of certain large newspapers was in behalf of the contention of the importer, whereas domestic manufacturers of news print paper supported the contention of the government."

Do You Tolerate Deterioration

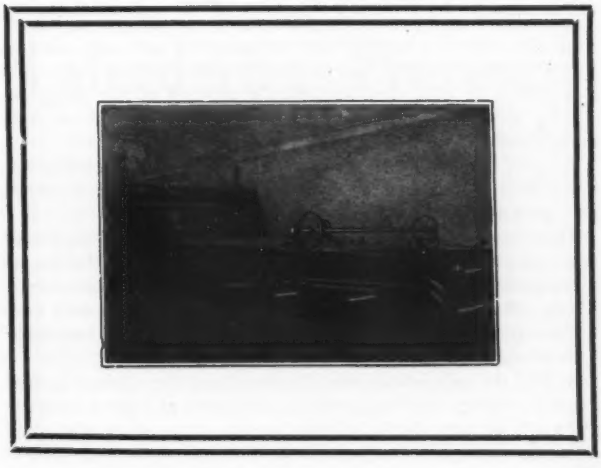
When you fail to weigh the cost of new, modern machinery against the excessive upkeep of the old, you are tolerating deterioration and doing an injustice to yourself. The law of diminishing returns works relentlessly, and in the science of papermaking a transformation is taking place at present that has reached mammoth proportions.



When your production wanes, when your costs keep on mounting, isn't there a possibility that it's time for the scrap-heap? Many users of the NEW BELOIT FOURDRINJER can testify to the benefit that this modern equipment has brought to them. In one case it meant a 15% increase in production in the first week of operation. In another it meant nearly 200 tons increase in production with a saving of over 600 man hours in time and labor.

The new era in paper-making is upon us and the NEW BELOIT is contributing to this in no uncertain terms. It will pay you to investigate.

When one mill can produce paper cheaper than another, it is obvious that something is wrong. Over thirty millions of dollars were saved in one year by the railroads through the retirement of old locomotives and the substitution of modern efficient types. The financial statements of many roads were, partially for this reason, in a much healthier state than at any time since the war. The same holds true with paper mills—those mills that utilized modern equipment had every advantage over those that had obsolete machinery.



Send for Bulletin No. 9 for further facts.

The NEW BELOIT FOURDRINIER

BELOIT IRON WORKS — Beloit, Wisconsin, U. S. A.

First Mill in World To Make Paper From Yellow Pine Fiber

Two residents of Orange, Texas, one since deceased, the other yet living and the head of several of that city's greatest industries, are responsible for the development of paper-making in the south. A fifth of a century ago, in 1905, these two men, W. H. Stark and the late Dr. E. W. Brown, inaugurated the first serious attempt to make paper from yellow pine saw mill waste.

Both men were vice presidents of the Lutcher & Moore Lumber Company, as well as directors in other lumbering concerns in Texas and Louisiana, and both were familiar with the tremondous waste daily occurring at each mill in which they were interested.

Associating with themselves the late I. Miller, J. W. Link, at present executive head of the great Kirby Lumbering interests, and others, they organized the Yellow Pine Paper Mill company and set seriously about the task of making a marketable kraft paper from yellow pine refuse.

True Pioneers

They were truly pioneers and, like all pioneers, met with many discouragements, disappointments and set-backs. Selecting a site in the then western suburbs of the city, on the banks of Adams' bayou, they erected a little ten-ton mill and set seriously about the task of converting the waste from the local lumber mills into a profit, instead of a deficit.

For six years experiment followed experiment in heartbreaking succession, but the best experts the company could hire signally failed to eliminate all the turpentine from the pine shavings and other refuse and the finished product would show up spotted with oily blotches.

Fortunately for the future of the paper-making industry of the south, the men behind the Yellow Pine Paper Mill company had ample capital and an abiding faith that some day they would work out the right solution of their problem.

Double Capacity of Plant

About 1909 they decided the plant was too small ever to become profitable, even if a better process were evolved and, with the same adventurous spirit which had characterized their earlier ventures in saw-milling in 1910, they doubled the capacity of the plant, enlarging it, at a cost of many thousands of dollars, to a 25-ton daily capacity mill.

All this time the soda process had been used for reducing the wood fibre to pulp and, at that time, this was thought to be the only process which could be used.

Then, after a fortune had been spent on changes of equipment and experimentation, the company sent an expert to Europe to make a comprehensive and exhaustive study of the sulphate process, which, although generally in use on the continent, had only been tentatively adopted by two spruce mills in America and had never been tried out on pine.

In 1911 the soda process was abandoned and the sulphate process adopted, making the Orange mill the first ever to make a commercial grade of paper by the sulphate process from yellow pine wood or waste.

Geo. S. Holmes Secured as General Manager

Geo. S. Holmes, a recognized technical expert and a veteran paper-maker, was secured as general manager of the newly rebuilt plant and within a very short time was turning out an excellent grade of kraft paper.

From time to time still more modern equipment and machinery were added and within a much shorter time than the oft-disappointed owners had anticipated the mill was turning out a high grade of kraft paper, every pound of which was contracted for in advance to jobbers of national reputation and standing, and after six years of trials and tribulations the future of yellow pine paper making in Orange was placed on a secure and permanent basis.

In 1918 the mill was again virtually rebuilt and its capacity increased to 35 tons daily, which capacity it still maintains.

Two Things Demonstrated

This pioneer mill had demonstrated two things which have proven of material benefit to everyone interested in paper-making in the south. The first, which cost the owners of the Orange mill more than a million dollars to finally determine, is that the soda process will not work successfully in making paper pulp from yellow pine.

The second of equal importance, is that no saw mill with less than 400,000 feet daily capacity could possibly furnish enough waste to keep even a 25-ton mill in operation.

The Orange mill uses all the waste from the two large Lutcher & Moore Mills at Orange, but this waste is only used for fuel and then 7,000 barrels of crude oil are used each month for fuel, while tthe raw material for the actual pulp making is brought to the paper mill from points near Orange where it is cut from small-sized timber on cut-over lands. This manner of procuring raw material serves the double purpose of clearing this land for agricultural and horticultural purposes and supplying the mill a much more satisfactory and assured supply of raw material.

Another reason for discarding the use of saw mill waste lies in the fact that this supply is not dependable. A paper mill, unlike a saw mill, cannot operate only three or four days out of a week. Once it starts its weekly "cycle" of manufacture all of its raw material must be carried through to the finished state, which requires six days.

The sulphate process, now used by the Orange mill and adopted by all mills since built in the south for the utilization of saw mill waste and timber from cut-over lands, has been found not only the sole process which will eliminate resin from the pine wood, but it also produces a stronger paper.

Process Used at the Orange Mill

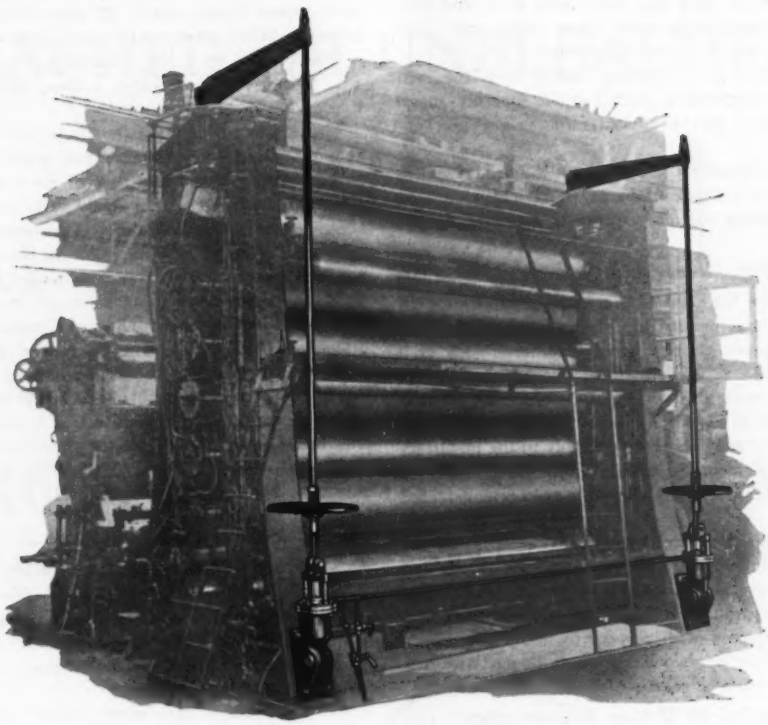
The process, as used at the Orange mill, consists in cutting down the timber and splitting same into four-foot lengths, as though it were to be used as fuel. These "bolts" as they are called, are trucked to the mill and there put through a mechanical "hog," which reduces the wood to small bits. These are then boiled in a closed vessel at a temperature of 340 degrees Farenheit, with a solution of sulphide and hydroxide of soda, until the wood is broken down into a soft pulp, which is then put through the paper-making machines the same as any wood pulp.

After spending $2,500,000 in experiments and changes of equipment, discarding old and adopting new processes, the present directors of the Yellow Pine Paper Mill Company can look over their fine plant, as it hums merrily 24 hours of each day, and congratulate themselves upon two things: First, this pioneer mill has demonstrated beyond any doubt the entire feasibility and practicability of making kraft paper from yellow pine, and, second, that the present plant, conservatively managed and with a fair market, will eventually pay off the huge amount spent in experimental work.

W. H. Stark still heads the company as president, the other officers being: R. A. Moore, vice president; H. L. Brown, active vice president; Hunter Beatty, manager; E. W. Brown, Jr., secretary treasurer; W. J. Meyer, sales manager.

Some Experimental Results

During the years of experimentation at the Orange mill it gradually came to be recognized as a great laboratory, conducted at the expense of its owners, where every phase of paper and pulp manufacture, insofar as it applies to Southern woods, was gone into and definite results arrived at, their good and bad features carefully tabulated and all correlated facts connected therewith carefully set down for the use and benefit of the lumbering fraternity generally



High Standards of Uniformity in Super Calendering Process

The ease of duplicating results with the Valley Hydraulic Pressure Device increases the capacity of the super calender for producing high finished paper, reduces excessive wastes in the mill and raises the efficiency of both men and the machines. The amount of pressure for the desired finish, across the entire sheet, once determined can be maintained throughout a run. This is a distinct advantage as it safeguards uniform finish and uniform mill work. Slight changes in pressure to maintain uniformity when other conditions of the paper vary can be made easily with the Valley Hydraulic Pressure Unit, resulting in a uniform product under conditions where this would otherwise be impossible.

Easily Installed on Calenders in the Mill

The Valley Hydraulic Pressure Unit can be easily installed by your millwrights in a short time with no undue delay to the calender. When this equipment is installed it is not necessary to make any changes in the calender rolls or in the super calender equipment in general. There is no "breaking in" period of loss production after the installation is made.

Write today for descriptive Booklet.

VALLEY IRON WORKS CO.

APPLETON, WISCONSIN

New York Office: 350 Madison Ave.

of the south. These experiments have been the means of saving other mills since established much loss of time and consequent expense, and all have had access to the findings of the company's experts and experimenters.

This company has demonstrated that both news print and book paper can—and will, eventually—be made from yellow pine, with a judicious admixture of gum or other hardwoods.

Only recently a Louisiana mill, profiting largely from the facts adduced in the Orange experiments, turned out a superb'y super-calendered book paper from pulp produced from yellow pine and gum mixed.

An Alabama mill a few months ago turned out a splendid quality of news print made entirely from Alabama short leaf pine. An entire issue of a Birmingham daily newspaper was printed on this white news stock.

News Print from Black Gum

The program used at the National Conference on Utilization of Forest Products in 1924 was printed on white paper, of the consistency of news print, made entirely from Southern black gum that had not been bleached. It was stated on this program: "The high yield, the excellent natural color of the pulp give promise that such broadleaf woods as aspen, birch, beech, maple, black and tupelo gum and cottonwood may be used profitably in the manufacture of news print to supplement the rapidly diminishing supply of spruce, which is at present practically the only species considered suitab'e for news print."

If this new process proves commercially feasible it will spread the burden of the news print supply over a large number of woods and over new regions, especially the south. Both for the reason that the climate here is most favorable for forest growth, and because it is most advantageously situated with respect to many paper-consuming centers, the southern hardwood region is bound within a few years to become a permanent source of pulp-wood supply.

Another Thing Settled by Orange Experimenters

Another thing practically settled by the Orange experimenters is that the cut-over lands of the south will never be cleared of stumps if the paper mills are expected to utilize the stumps. H. Lutcher Brown, active vice president of the Yellow Pine Paper Mill company at Orange and President of the Brown Paper Mill company of Monroe, La., (a $2,000,000 concern with the most modern mill yet built in the south) has made a close study of every phase of paper making from yellow pine and other southern woods. He stated recently:

The proces of extracting turpentine from stumps destroys the fiber and renders them unfit for making kraft paper. Boxboard might be made from stumps, but there is not sufficient demand for this material to justify paper mills in incurring the expense in getting the stumps out of the ground and to the mill.

"The solution of clearing the lands of stumps, to my mind, lies in the erection of plants for the manufacture of turpentine, resin and other chemical by-products to be derived from those stumps.

After all these various materials have been extracted from yellow pine stumps there remains a residue which is worth to the plant perhaps $3.00 per ton as fuel."

That the founders and present owners of the Yellow Pine Paper Mill company have full faith in the ultimate commercial and financial success of paper-making in the south is attested by the fact that the capital stock of this company is $1,000,000, fully paid up, and that it is unlisted on any stock exchange, and none of it is for sale.

Paper Index Number for June

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., July 21, 1926.—Taking 1913 at 100 per cent the index number of wholesale prices on paper and pulp for the month of June was 175.3 compared with 175.3 for May, and 184.5 for June, 1925, according to the Bureau of Labor Statistics, Department of Labor.

Elmer Smith Meets With Fatal Accident

CORINTH, N. Y., July 19, 1926.—The first fatal accident at the Hudson River Mill of the International Paper Company at Palmer since the inauguration of the safety campaign, occured early last week when Elmer Smith, 22 years old, of Luzerne, was almost instantly killed when caught in a paper machine. Mr. Smith was a "third hand" on a No. 3 machine and as no one could be found who witnessed the accident, nothing definite is known as to how it occured.

The accident took place shortly before ten o'clock in the morning and Mr. Smith's body was found some time later by fellow employees with his arm and part of his body caught in the machine. From the position of the body it is evident that his hand had become caught between the reel and the drum drawing his arm and head into the machine. As the reel is comparitively soft he was not badly mutilated and no marks were visible on the head although the pressure was sufficient to cause a fractured skull.

H. C. Johnson, plant physician, was hurriedly summoned to attend the man but he was dead when the physician arrived, the direct cause of death being a fractured skull. The only visible marks on the body were black and blue marks about the shoulder.

The victim of the accident, which is said to be a rather unusual one, had been employed by the International Paper Company at the Hudson River Mill for the last three years and was very popular with his fellow employees. He is survived by his wife and an infant son and his mother.

Buys Used Bags to Resell

KNOXVILLE, Tenn., July 19, 1926.—One of the new businesses which is prospering in Knoxville is the Knoxville Bag Company, owned by J. Erbesfield, who came here recently from Columbia, S. C. He is established on Depot street, and buys old bags of any and every kind, and sells them.

Mr. Erbesfield is very much pleased with Knoxville as a business center for a used bag business, and has great hope for the future of his business.

He is especially anxious to get in touch with millers, bakers, wholesalers, jobbers, crushed rock people, and all others who have bags of any kind to sell or who may want to buy bags.

The Knoxville Bag Company makes it possible for every householder with only a few bags to dispose of, or the large dealer with great piles of them to dispose of them at a profit.

"Save every bag that you get hold of," says Mr. Erbesfield, "and bring them to us, or call our telephone number and a representative will call and make you the top price.

"The mere fact that bags have printing on them makes no difference as the printed side can be turned inside and used again just as well as before.

"So bring them along; we'll buy them and dispose of them to people who can use them," Mr. Erbesfield urges.

News of the Michigan Paper Industry

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., July 19, 1926.—The Munising Paper Company, Munising, Mich., announces plans to install $150,000 additional machinery in its plant, also erect a dock at a cost of $115,000 with a capacity of 60,000 tons.

The Consumers Power in its annual report for 1925 shows an addition of 25 communities to its system in Michigan, an increase of 53,000 electric and gas customers, sale of $10,556,000 preferred stock and expenditure of $15,696,000 for additional equipment and general improvement. Eighty-five per cent of the 32,000 stockholders reside in Michigan.

The late A. H. Dwight, president of the Hawthorne Paper Company, left an estate of $137,000, all to relatives. Herbert Pardee, Robert L. Pease and Frederick C. Clark are administrators.

Fire of an unknown origin in the sorting room of the King division of the Allied Paper Mills, did damage amounting to $700. The flames were confined to that one room.

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PRINTING PAPER
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EVERY DESCRIPTION

New York Trade Jottings

The Swedish-American Line announces that plans are now under way for the construction of another motorship of the same type as the *Gripsholm*, and it is expected that the new vessel will be ready for the New York-Gothenburg service in 1928.

* * *

The New York Stock Exchange has admitted to the list for trading the Crown Willamette Paper Company first preferred stock allotment certificates, fully paid, representing 149,000 shares of no par first preferred, and voting trust certificates representing 149,000 shares of no par common.

* * *

Net profit of $1,364,164 reported by Allis-Chalmers Manufacturing Company for the first five months this year is equal, after preferred dividends, to $3.42 a share on the common stock outstanding. Profit and loss surplus was $14,948,203, against $14,269,302 at the close of 1925.

* * *

L. J. Belnap has been elected president of the Worthington Pump and Machinery Corporation, of 115 Broadway, New York, C. Philip Coleman, retiring president, has been elected chairman of the board. Mr. Belnap was formerly of Rolls-Royce of America and chairman of Wills St. Claire Company, of Detroit, Mich.

* * *

The annual convention of the Wall Paper Manufacturers' Association opened on Monday at the Hotel Commodore, New York, and will end today, Thursday. The annual show included 32 exhibits and the influence of the so-called modern art, as exemplified at the Industrial Art Exhibition in Paris, is seen in many of the patterns.

* * *

The New York Curb Exchange has admitted to unlisted trading privileges voting trust certificates for 90,000 shares of $100 par preferred and 140,000 shares of no par common stock, of the American Writing Paper Company. The Committee on Arrangements ruled that all transactions in securities of the recently reorganized American Writing Paper Company shall be recorded for purposes of identification as American Writing Paper Company.

* * *

The Standard Paper Manufacturing Company, with mills at Richmond, Va., have moved their New York headquarters to larger and better appointed offices in the Vanderbilt Concourse Building, 52 Vanderbilt Avenue, New York, Telephone Murray Hill 0102, where they will be represented by M. F. Montague, Manager of Sales, and R. E. Estes. Their sample cabinets are replete with a full line of everything the company manufactures, and can be furnished immediately upon request.

* * *

Earnest Wooler, chief engineer in charge of automotive, industrial, experimental and service engineering for The Timken Roller Bearing Company, of Canton, Ohio, sailed on the *Berengaria* last Wednesday for England, the place of his birth. He will make an investigation of the development of anti-friction bearings in all industries and at the same time look over the British Timken plant at Birmingham. Mr. Wooler served his apprenticeship in the Rolls-Royce English plants and helped Mr. Royce to develop the first two-cylinder Rolls-Royce in 1903. His first American connection was with Continental Motors Company. Later he became associated with Mr. Chandler as assistant chief engineer of the Chandler Motor Car Company, of Cleveland. He designed the Cleveland car in 1919 and then became chief engineer of the Cleveland Automobile Company. His connection with the Timken organization dates from 1925.

May Merge Plants Under F. W. Leadbetter

PORTLAND, Ore., July 19, 1926.—A merger of the Oregon Pulp and Paper Company's plant in Salem, and the Columbia Paper Mills in Vancouver, Wash., and another plant in Los Angeles, all under the control of Fred. W. Leadbetter of Portland, is being considered by the board of directors, although as yet no direct official announcement has been made.

Should the contemplated merger go through it would in all probability include the Western Paper Converting Company also of Salem. This plant now manufactures into the finished product, part of the raw paper produced by the Oregon Pulp and Paper company.

Since Mr. Leadbetter came into control of the Oregon Pulp and Paper company a few months ago, great improvements have been planned, part of which are completed and others of which are under way, involving a total investment of about $1,200,000. A large building is now being erected which will house one of the largest paper machines in the west. This machine is designed for the production of glassine, grease proof and bond papers. This new machinery will cost at least $70,000.

Good Progress on St. Helens Mill

PORTLAND, Ore., July 19, 1926.—The smoke stack is rising on the new plant of the St. Helens Pulp and Paper Company, St. Helens, Ore. It is thirty-five feet in diameter and will tower 150 feet above the other structures of the large group.

Contract for electrical equipment has been let. More than half of the machinery for use in this plant has now arrived, and the rest is ready for shipment or in transit. The structural steel in the boiler room is being set up, and also in the recovery room, and the concrete fire-room is almost finished.

The interior of the main building is completed, the painting having been done with a modern compressed air spray gun.

In fact, the work has progressed so satisfactorily on this plant, with about 300 workmen constantly on the job, that the management feels the plant will be ready by January 1st.

Transparent Paper Mfg. Co. Starts

PORTLAND, Ore., July 19, 1926.—The Transparent Paper Manufacturing company is a new concern just opened for business at Fourth and Couch streets, Portland, Oregon. W. F. Frantzel is president of the company and Otto Vetter is secretary-treasurer. Machinery is being installed in the new plant which covers a floor space of 3500 feet, and the officials state that the aim is to get a finished product on the market in less than sixty days.

The company is unique in that it will manufacture the transparent paper, and then convert the product into bags, boxes, containers and other novelties, ready for the retail market. The process is one new to the United States, having been imported from Germany.

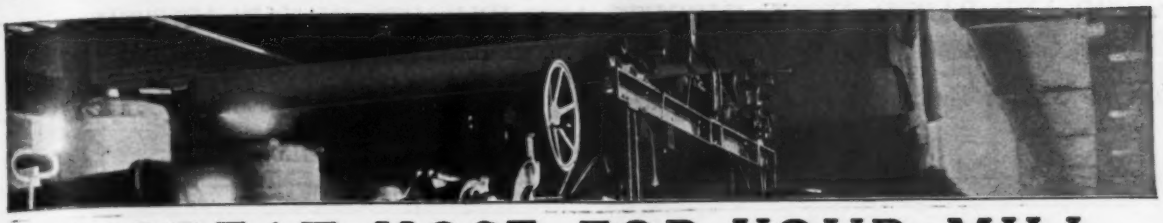
May Build New Mill at Longview

PORTLAND, Ore., July 19, 1926.—Sherman M. Mills, who is interested to a large extent in the new St. Helens Pulp and Paper Mills under construction in St. Helens, Ore., has announced that a paper mill will be erected at Longview, Washington. Eastern capital has been secured for this purpose from financial organizations whose representatives have been inspecting the territory in the region for several weeks.

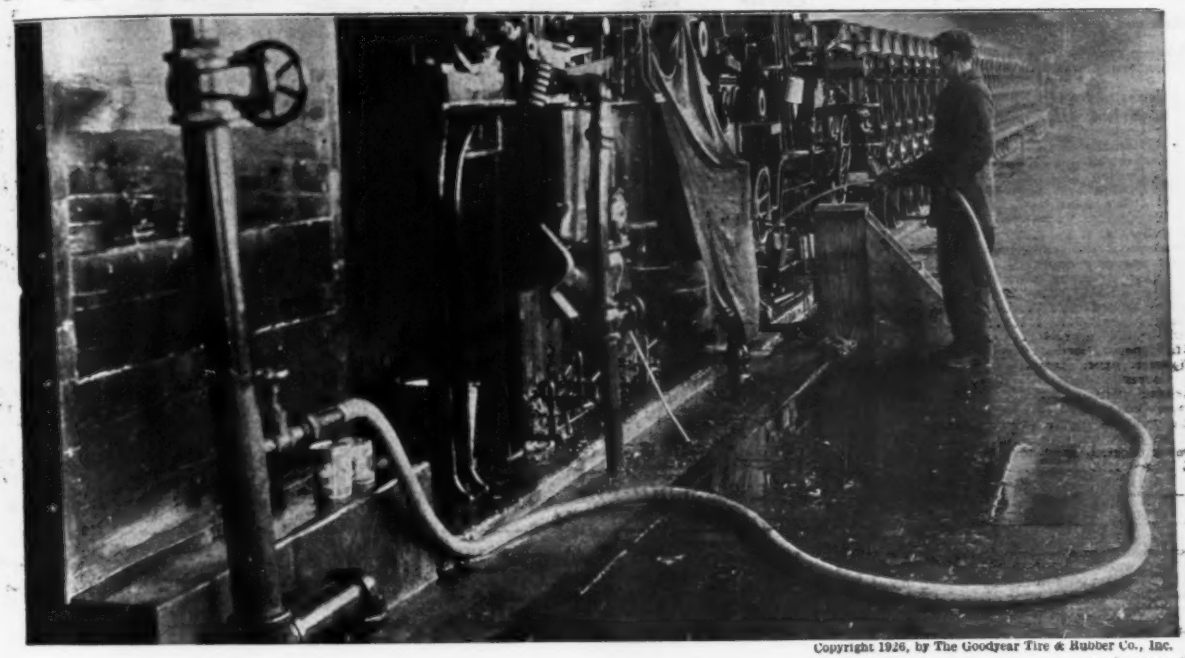
Government Printing Office Receives Bids

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., July 21.—The Government Printing Office has received the following bids for 300,000 pounds machine-finished book paper, in 48 inch rolls, Bryant Paper Co., 9.24 cents per pound; Allied Paper Mills, Inc., 1.17 cents; Old Dominion Paper Company, 9.29 cents; and American Writing Paper Company, 9.5 cents.



A GREAT HOSE FOR YOUR MILL



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An exceptionally good hose for such hard service as washup work in paper mills is Goodyear Style M Sanitary Hose. Note its special merits for your industry:

It has a non-flaking tube—no rubber flaking off and spoiling the batch.

It is made rigid, providing special resistance to hard use, and even the abuse that hose frequently gets being dragged over the concrete floors and around machines and pillars.

It has a tapered nozzle built integral with the body, when required, to provide a reduced stream at greater pressure, and to permit a fan-shaped play rather than a direct full force against the screens.

Like all Goodyear products for the special use of the paper industry, Goodyear Style M Sanitary Hose is specified to this duty by the G. T. M.—Goodyear Technical Man. You will find its advantages in efficiency, durability and long, economical life will pay you well.

GOODYEAR HOSE
Water, Steam, Washup, Fire and Mill
TRANSMISSION BELTS
Thor, Goodyear, Klingtite, Glide
CONVEYOR BELTS
PACKING—***Asbestos, Rubber Sheet*** **PUMP VALVES**

Goodyear Means Good Wear

GOODYEAR

SANITARY HOSE

PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

For the Month Ending May 31, 1926, and for the Eleven Months Ending May 31, 1926 as Compared with Corresponding Months of Previous Year

IMPORTS—PAPER

	May				Eleven Months Ending May 31			
	1925		1926		1925		1926	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Paper and manufactures (total)	.....	9,997,202	.....	10,218,927	.....	107,364,228	.....	115,001,883
Printing paper—								
Standard newsprint .....lbs...free	246,913,137	8,762,939	269,739,762	9,018,363	2,562,258,123	93,076,753	2,890,694,549	100,540,113
Imported from—								
Finland	4,394,546	132,464	8,250,289	237,872	57,210,573	1,810,557	40,990,028	1,223,721
Germany	4,321,331	134,046	1,603,475	47,855	49,580,316	1,489,098	43,504,803	1,334,788
Netherlands	494,297	15,994	.....	.....	1,687,656	55,632	352,849	10,600
Norway	5,700,672	166,081	227,896	6,513	40,487,032	1,266,145	16,251,882	489,985
Sweden	13,343,327	398,743	2,756,163	83,541	138,546,648	4,269,939	96,098,560	2,925,586
Canada	218,183,391	7,901,357	255,157,989	8,587,698	2,260,845,108	83,728,408	2,635,265,289	92,626,570
Other countries	475,574	14,254	1,743,950	54,884	13,900,790	456,974	58,231,138	1,928,863
All other, n. e. s.....lbs...dut.	1,904,124	92,629	2,440,944	115,437	22,460,914	1,018,408	13,545,281	680,947
Grease-proof and water-proof papers..lbs...dut.	194,738	27,129	120,246	26,158	1,492,117	181,827	2,170,780	319,945
Kraft wrapping paper .....lbs...dut.	829,427	36,316	510,017	21,999	18,543,193	748,668	9,803,858	427,564
All other wrapping paper.....lbs...dut.	412,502	19,335	644,601	33,068	11,402,008	468,988	4,210,442	284,730
Writing, drawing, bond, etc.....lbs...dut.	199,101	51,614	287,680	72,710	2,843,396	640,832	3,269,831	756,398
Surface coated .....lbs...dut.	118,955	51,479	238,110	75,157	1,729,881	464,624	1,617,145	586,002
Tissue paper .....lbs...dut.	277,692	139,676	167,057	89,102	2,646,165	1,067,569	2,337,513	1,030,471
Pulp boards in rolls .....lbs...dut.	5,638,666	143,943	7,229,038	173,919	64,285,769	1,720,971	68,446,882	1,726,202
Other paper boards, n. e. s.....lbs...dut.	2,120,307	49,902	3,359,693	87,156	29,318,312	687,131	27,481,805	680,772
Cigarette paper, cigarette books and covers .....lbs...dut.	866,223	208,572	494,549	123,045	8,565,021	2,377,435	9,983,824	2,790,813
Hanging paper .....lbs...dut.	284,435	32,603	134,509	27,975	9,178,935	511,573	4,224,741	570,489
Paper boxes .....lbs...dut.	211,144	119,053	106,940	47,989	2,119,290	1,354,660	1,921,003	997,753
Pulp or papier-mache and manufactures of, n. e. s. .....lbs...dut.	.....	.....	92,575	21,580	.....	.....	960,042	162,225
Duplex decalcomania, not printed.....lbs...free	36,710	9,677	45,482	10,997	473,908	117,981	443,490	111,762
All other .....dut.	.....	252,335	.....	274,272	.....	2,926,808	.....	3,335,697
WOOD PULP								
Mechanically ground wood pulp.....ton..free	29,125	766,614	17,078	523,151	239,940	7,410,175	255,440	7,318,699
Chemical wood pulp—								
Sulphite, unbleached .....ton..free	41,647	2,224,722	45,924	2,695,234	563,578	29,956,184	527,058	29,762,897
Sulphite, bleached .....ton..free	21,849	1,713,597	20,899	1,683,868	283,811	21,356,045	254,873	20,538,730
Total sulphite .....ton	63,496	3,938,319	66,823	4,379,102	847,389	51,312,229	781,931	50,301,627
Imported from—								
Finland	4,272	175,668	4,726	262,838	52,888	2,686,859	47,961	2,650,437
Germany	3,705	236,541	8,499	534,756	75,888	4,477,841	62,922	4,106,589
Norway	4,343	342,474	4,704	379,714	71,142	4,993,367	60,834	4,830,160
Sweden	18,818	1,146,107	14,666	909,094	297,158	16,658,234	210,044	12,750,980
Canada	29,973	1,909,862	33,423	2,247,382	318,389	20,698,041	375,110	24,597,912
Other countries	2,385	127,667	805	45,318	31,924	1,797,887	25,060	1,365,549
Sulphate pulp, unbleached (Kraft pulp) .....ton..free	23,770	1,436,067	27,371	1,775,875	283,646	16,177,611	270,670	16,774,511
Imported from—								
Finland	361	18,819	3,540	209,234	12,938	634,561	18,475	1,028,813
Norway	184	10,857	2,025	130,648	11,703	645,516	9,905	627,520
Sweden	12,787	724,639	10,781	698,724	141,202	7,485,435	115,468	6,806,974
Canada	10,340	676,852	10,903	730,666	113,151	7,166,470	122,213	8,003,086
Other countries	98	4,900	122	6,603	4,652	245,629	4,609	308,118
Sulphate pulp, bleached .....ton..free	3,167	189,997	672	41,122	31,483	1,784,776	15,875	923,401
Other pulp .....ton..free	248	11,837	266	20,560	2,067	138,753	1,251	84,857
CRUDE PAPER STOCK								
Rags for paper stock .....lbs...free	33,630,833	981,210	29,067,174	648,097	537,995,450	14,435,054	492,521,662	12,358,122
Waste bagging, waste paper, etc.....lbs...free	8,265,289	142,903	9,363,203	192,496	109,996,860	1,598,675	124,545,538	2,394,860
Old rope and all other paper stock...lbs...free	6,701,454	346,155	6,635,966	250,055	75,668,648	4,108,029	68,732,779	3,125,577
CHEMICALS AND OTHER PAPER MAKERS' MATERIALS								
Colors, dyes, stains, color acids, and color bases, n. e. s. .....lbs...dut.	515,925	710,347	553,492	608,600	4,618,209	6,319,850	4,379,184	4,805,402
Imported from—								
France	12,508	16,614	3,007	4,875	115,527	166,367	127,745	178,231
Germany	235,718	305,157	358,723	351,337	2,344,434	3,297,704	2,039,021	2,171,239
Italy	27,746	31,517	5,502	5,410	190,834	252,201	97,017	110,056
Switzerland	176,054	262,656	140,035	183,415	1,459,391	1,979,231	1,719,237	1,820,541
United Kingdom	22,349	18,612	12,029	11,268	162,774	144,065	131,729	119,787
Other countries	41,550	75,791	34,196	52,295	345,249	480,282	264,435	405,548
Casein or lactarene .....lbs...dut.	2,672,738	219,623	3,088,971	320,901	17,772,191	1,306,294	19,875,139	1,829,561
Kaolin, china, and paper clay.....ton...dut.	20,366	216,449	35,750	340,236	298,950	2,882,828	305,221	3,015,484

(*Continued on page 44*)

—LICENSED—

For several years we have been producing Aldrich Removable Fourdriniers We interchange design with the Inventor

ASK US

The Pusey and Jones Company

Wilmington, Delaware

PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

(*Continued from page 42*)

EXPORTS—PAPER

PAPER AND MANUFACTURES OF	May 1925 Quantity	May 1925 Value	May 1926 Quantity	May 1926 Value	Eleven Months Ending May 31 1925 Quantity	Eleven Months Ending May 31 1925 Value	Eleven Months Ending May 31 1926 Quantity	Eleven Months Ending May 31 1926 Value
Paper and manufactures (total)	.....	2,164,932	.....	2,201,274	.....	21,096,898	.....	23,635,652
Printing paper—								
News print paper ....lbs.	4,322,086	199,385	3,883,317	185,604	32,794,335	1,587,013	41,554,762	1,914,174
Exported to—								
Canada	29,535	2,715	133,097	9,248	882,177	63,617	1,104,044	78,022
Central America	85,450	4,992	138,094	6,855	731,089	39,366	1,524,834	76,455
Mexico	68,033	3,867	86,584	3,963	1,861,304	95,661	1,421,211	76,104
Cuba	2,799,139	126,396	569,728	26,175	15,954,452	682,483	9,092,398	382,830
South America	690,887	33,057	752,229	34,792	5,596,754	274,780	6,964,331	323,581
China	257,344	10,172	839,445	40,624	2,392,136	163,735	8,400,593	382,515
Philippine Islands	335,990	15,294	890,427	43,301	4,062,888	186,332	5,908,272	274,497
Other countries	55,708	2,892	473,713	20,646	1,313,535	81,039	7,139,079	320,170
Book paper, not coated ....lbs.	1,698,159	200,593	1,625,072	144,234	18,025,786	1,972,235	15,705,941	1,639,841
Exported to—								
United Kingdom	29,397	5,215	58,805	5,703	340,579	70,168	139,044	19,432
Canada	247,431	36,153	625,975	46,013	1,811,689	222,477	2,577,363	271,391
Central America	42,117	4,729	51,214	5,567	592,125	64,371	632,982	67,715
Mexico	156,345	19,571	100,562	10,936	2,119,746	241,185	1,621,712	177,642
Cuba	442,637	47,306	113,254	9,342	4,151,079	429,751	3,181,340	306,628
Argentina	69,713	5,477	37,588	2,760	572,747	58,953	692,608	74,642
Brazil	31,460	2,783	13,137	1,372	306,789	37,053	224,133	33,234
Venezuela	65,266	7,360	35,465	3,516	457,912	49,482	738,244	72,674
Other South America	157,834	14,659	39,745	3,584	1,256,260	134,022	1,158,978	110,136
China	110,999	18,106	32,556	7,207	3,556,571	340,322	1,148,811	154,675
Philippine Islands	66,886	5,804	236,362	21,683	1,135,599	107,384	1,665,419	147,436
Australia	72,970	8,042	22,259	3,118	481,668	53,605	447,697	48,274
Other countries	205,104	25,388	258,150	23,433	1,243,022	163,462	1,477,610	155,962
Cover paper ....lbs.	89,107	17,065	75,652	14,219	963,563	186,349	1,210,870	219,525
Grease-proof and waterproof paper ....lbs.	151,694	20,392	303,711	37,198	1,494,043	178,489	2,188,725	317,163
Wrapping paper ....lbs.	2,888,293	238,329	3,018,213	166,989	24,801,025	1,941,109	28,736,905	2,060,777
Surface-coated paper ....lbs.	517,587	76,322	479,890	65,553	3,200,576	463,109	5,177,656	675,034
Tissue and crepe paper ....lbs.	267,245	70,240	322,929	81,531	3,045,179	817,905	3,626,433	922,447
Toilet paper ....lbs.	572,939	59,761	345,381	39,499	4,320,119	518,889	4,487,664	544,952
Paper towels and napkins ....lbs.	93,168	13,865	152,541	25,308	1,232,542	199,087	1,806,660	260,391
Box board ....lbs.	851,253	29,119	4,098,841	120,975	[1] 4,564,634	[1] 178,338	35,044,693	1,099,146
Bristols and bristol board ....lbs.	66,975	8,007	189,841	16,700	746,793	93,998	1,318,865	154,098
Other paper board and strawboard ....lbs.	2,554,170	128,846	3,499,318	163,748	46,662,221	1,853,992	32,246,216	1,655,693
Sheathing and building paper ....lbs.	1,154,619	50,399	879,746	34,810	10,245,364	488,474	11,271,891	508,444
Wall board of paper or pulp....sq. ft.	1,483,512	43,351	2,501,561	85,043	13,729,941	467,347	16,107,876	538,709
Blotting paper ....lbs.	253,103	30,683	276,586	32,821	2,497,082	296,574	2,914,458	370,577
Filing folders, index cards, and other office forms ....lbs.	49,430	17,162	50,659	16,000	486,772	157,672	706,377	221,593
Papeteries (fancy writing paper) ....lbs.	40,754	13,913	42,119	12,104	453,757	154,582	552,733	195,603
Other writing paper ....lbs.	272,220	46,638	780,763	130,545	3,036,806	506,501	6,558,452	1,146,095
Cigarette paper and books ....lbs.	45,324	14,039	28,935	6,828	509,910	160,261	504,380	129,858
Paper hangings (wall paper) ....yds.	1,617,182	45,216	1,711,094	44,321	23,482,970	587,088	21,649,199	541,267
Paper bags ....lbs.	1,378,228	118,078	850,861	72,720	10,889,634	936,551	11,606,564	1,033,988
Boxes and cartons ....lbs.	1,654,871	124,460	1,500,180	105,853	13,172,034	1,115,031	18,036,846	1,295,757
Envelopes ....lbs.	269,153	48,138	232,047	40,352	2,396,392	453,323	2,284,363	434,556
Vulcanized fiber, sheets, strips, rods, and tubes ....lbs.	529,260	152,765	602,110	169,154	4,352,171	1,349,934	5,411,529	1,595,958
Manufactures of vulcanized and indurated fiber ....lbs.	47,081	17,799	57,013	15,645	403,402	179,606	426,357	147,336
Cash-register and adding-machine paper....lbs.	103,064	10,651	180,906	18,072	1,301,009	137,749	1,599,567	166,589
Other paper and paper products	.....	369,716	.....	355,448	.....	4,115,692	.....	3,846,081
WOOD PULP AND PAPER STOCK								
Sulphite wood pulp ....tons	1,777	110,176	902	73,128	20,760	1,231,542	20,025	1,313,470
Soda wood pulp ....tons	113	9,235	1,190	59,246	1,766	165,153	3,243	239,143
Other wood pulp ....tons	143	7,996	1,314	54,407	8,599	916,521	6,994	683,058
Rags, and other paper stock ....lbs.	18,702,211	304,118	15,710,403	212,457	132,891,444	2,222,521	169,074,967	2,954,638
PAPER AND PULP MILL MACHINERY								
Paper and pulp mill machinery ....lbs.	543,658	120,064	1,119,923	208,487	6,749,166	1,470,296	9,505,456	2,173,962

[1] Beginning Jan. 1, 1925.

St. Lawrence Paper Mills

MONTREAL, Que., July 19, 1926.—The annual report of the shareholders of the St. Lawrence Paper Mills, Ltd., for the fiscal year ending June 30, is now being prepared. As the company enters upon an era of enlarged earning power in the period under review the report is being awaited with interest. It is understood that the net earnings have been running at the rate of over $100,000 per month for the last seven months. The company's new 100 ton sulphite mill came into operation about the time when there was a substantial advance in the market price of the product. Its newsprint production at present is 150 tons per day, but it is now installing two additional machines which will be completed in October, bringing the total output to 300 tons per day.

V. Bruce Knapp Joins Beecher, Peck & Lewis

[FROM OUR REGULAR CORRESPONDENT]

DETROIT, Mich., July 12, 1926.—Beecher, Peck & Lewis announce the appointment of V. Bruce Knapp as advertising and sales promotion manager.

Mr. Knapp was formerly with the G. Logan Payne list of newspapers, as Detroit manager, and in the past has been in the magazine and advertising agency field.

After a trip to various of the mills, whose lines the company handles, to get the story of the manufacturing of paper at first hand, he will prepare an advertising campaign to promote the interests of the BEECHER, PECK & LEWIS line of fine book papers. Direct mail and local publications will be used.

This service makes friends for your paper

YOU secure dependable results from the use of Kalbfleisch Rosin Size. The service that you also get adds to the advantages of this sizing.

It is an established fact that the smooth operation of the sizing process is necessary to trouble-free production. So Kalbfleisch Engineers are glad to place at your disposal all the information they have acquired from their long and close acquaintance with sizing processes.

The service of Kalbfleisch Engineers is centered upon securing your satisfaction by means of the De Cew Patented Processes with which Kalbfleisch Rosin Size is used.

They are glad to cooperate with you to the end that your sizing operations will measure up to the highest standards of efficiency.

The KALBFLEISCH Corporation

200 Fifth Ave., New York

Factories:

Erie, Pennsylvania
Brooklyn, New York

Kalamazoo, Michigan
Elizabeth, New Jersey

Chattanooga, Tennessee
Waterbury, Connecticut

PAPER TRADE JOURNAL
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HENRY J. BERGER, Editor

Member A. B. C. Audit Bureau of Circulations

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THE REASON FOR SAFETY STATISTICS

As the membership of the National Safety Council has been expanded and the income from dues has grown to provide enough money to employ safety engineers competent to assist the voluntary committeemen, an effort has been made to induce the members within certain groups of industries to send their statistical data to the council's headquarters for tabulation and comparison. The time is coming, W. H. Cameron, managing director, stated recently in an address, when each of the trade sectional groups will have salaried staffs to assist the voluntary officers and committees to dig deeper into the accident experience of each member within the group. It is now apparent that more data of this character can be secured through greater pressure upon the members, by visualizing to them the advantages of comparing experiences, and by encouraging these employers having bad records to study the methods of those having good records and eventually to correct the conditions that lead to high accident frequency and severity rates. These statistical records and comparisons of the members of the National Safety Council will never have the same comprehensive and inclusive comparative bases as the statistical reports of the national and state governmental bureaus. The Council is a propagandist institution. It aims to teach the public in a non-partisan way how serious the accident situation is nationally and to encourage employers and workers to wake up to the seriousness of the situation and to take steps to organize definitely for the prevention of accidents.

Even though the membership of the National Safety Council may increase greatly, and though it may be possible through persuasive methods to have a large percentage of the members interchange their statistical records, nevertheless it is probable that one of the continuing functions of the Council will be to encourage its members and others to comply generously with the National and State requirements for statistical records. Employers will be glad to give proof of their accomplishments when it is realized that a creditable accident record is an asset to the conduct of their business. The stigma of accidents is not yet a factor in industrial operations. The Council can help the administrators of the law to bring about this sensitiveness to public obligation.

Mr. Cameron points out that there are six reasons for collecting and comparing these accident statistics, (a) to promote uniformity, (b) to arouse pride of industry, (c) to secure direct comparisons, (d) to trace the national trend of accident experience, (e) to interest other companies in accident prevention, and (f) to help each individual company in analyzing and correcting its own accident causes.

The Council impresses upon the member the need for uniformity in compiling accident records, emphasizing the fact that these uniform methods of calculation from year-to-year should be maintained in spite of changes in the personnel of the statistical department; that frequent changes in the method of compilation create confusion and misunderstanding. Uniformity makes it possible to compare the record of one plant with the record of others having similar accident records.

Keen interest has been developed among the paper and pulp members of the Council by offering a "Paper Industry" silver loving cup to that mill having the best accident record for the first six months of 1926. The operating plant in this industry having the best record will be entitled to claim the honor of having the safest paper mill in America.

Of course, the compilation of these statistics makes it possible to trace the national trend of accidents within certain industries and leads to greater effort to ascertain the causes for increases or decreases.

The Council is distributing widely its pamphlets giving the approved methods of compiling accident statistics. It is preparing another pamphlet to be entitled "Competition as an Aid in Promoting Accident Prevention". A section of this pamphlet will present methods for using these statistical records in accident prevention contests. Copies of this new pamphlet will be available to inquirers.

No one will deny the value of recording accident experiences. The problem is to convince industry, and particularly the 92 per cent that employ less than one hundred workers, that such recorded experience will reveal disgraceful economic and human losses. The extension of the United States Bureau of Labor Statistics machinery to collect, tabulate and analyze the data on industrial accidents in the United States will be a step in the right direction. Such institutions as the National Safety Council will cordially assist in the educational problem of keeping the records and in achieving the goal of minimizing the terrific and unnecessary losses of life and money.

CANADA'S TRADE IN PAPER AND PULP

Canada's export trade in paper and wood pulp for the twelve months ended with May attained record proportions, according to the Dominion Bureau of Statistics. Wood pulp exports were valued at $50,691,894, as against $41,671,039 for the twelve months ended with May, 1925, an increase of 21.6 per cent. Exports of paper and paper products were valued at $111,285,276, compared with $100,537,832 in the previous twelve months, a gain of 10.6 per cent.

The greatest part of the paper exports consisted of news print paper, which was valued at $103,623,212, as against $92,488,532 in the previous year, an increase of 12.1 per cent. Exports of pulp wood showed a decrease of 9.5, being valued at $12,751,290, compared with $14,108,942 in the preceding twelve months.

Joseph B. Seaman Extends His Interests

Joseph B. Seaman, one of the most widely known men in the paper industry, has resigned as first vice-president of the Seaman Paper Company, effective June 1 last. He has been with the company 27 years and actively in charge of the firm's eastern headquarters since they were opened in the Fifth Avenue Building, New York City, in 1913—and this announcement will no doubt come as a big surprise to the very wide circle of friends who have come in frequent contact with him in the paper field. Mr. Seaman's stockholding interests in the Seaman Paper Company are unchanged and he continues as a director of the corporation.

For many years, in association with his brothers, and the Seaman Paper Company, he has been vitally interested in the development of various organizations which would promote the consumption and sale of paper. He is vice-president of the Mills Securities Corporation, which is a holding company for many of these interests. He has been deeply interested in the development of the Aquatone Corporation as its vice-president—the perfection of the Angel Paper Milk Bottle which is marketed through the Health Container Sales Corporation, of which he is president—and the distribution of the paper products produced by the Seaman Fibraknit process as employed by the Seaman Container Manufacturing Corporation, of which he is vice-president.

Aquatone Process is proving to be quite as revolutionary in the production of printing as was the linotype and the rotary printing press. It is already in production by six of the leaders in various fields of the printing art. The Angel Bottle is now being marketed on a commercial basis, and the dairy world, which has long been looking for a low cost and sanitary single service container, is vitally interested in this development. The Fibraknit process as employed in the production of containers with a wide variety of uses, has won quick acceptance from large users of containers, and the plant is already in practical production with a capacity of 10,000 units per day.

The Seaman brothers have been noted for rare vision and courage, and when they take up the exploitation of any given practice or process, they have made it a rule to back their judgment with their own capital until such time as theories have been reduced to practice. Now that Aquatone, the Paper Milk Bottle and Fibraknit containers have passed beyond the realm of experimentation into that of practical commercial successes, Mr. Seaman's organizing genius and sales ability, which contributed so much to the achievements of the Seaman Paper Company, universally recognized as one of the outstanding successes in the paper industry, will now be devoted exclusively to these co-related corporations. In this connection he has offices at 220 Fifth Avenue, where his friends will find him in Suite 1814-15 and 16.

A Warning to Paper Mills

The president of a large and well-known paper mill machinery manufacturing concern in Ohio writes the PAPER TRADE JOURNAL in part as follows:

"A gang of Portuguese a short time ago came to our office and put up a very plausible tale of how they could take old brass rolls of all descriptions used in paper mills and recover them, or by some mysterious process of plating, could add to the metal and put them in their original condition; and they wanted us to do a certain part of the work for them, such as polishing and cleaning the rolls, preparatory to their work. It seemed to us to be a very nice job for our shop so we fell in the game.

"They wanted some means of information regarding paper mills and I mentioned Lockwood's, and we agreed to write to you and this we did. They came on several occasions and brought work to us and for which they paid us. Finally they got a job out of our shop which amounted to considerable money, and that is the last we saw of them.

"Shortly after their first appearance we became suspicious of them and we made some inquiries, and now we have been informed that they took advantage of practically every paper mill in this district, and we have heard tales relating to some of the mills in Kalamazoo. As far as they are concerned we consider them the slickest lot of crooks which have imposed on paper mills in the last 40 years.

"It has been my intention to write an article on this subject for publication as a warning to other mills to be on guard against them.

"I believe if you will make investigation you will find that every mill in Ohio has had some dealings with these gypsies which has been to their loss."

Interest in Reforestation in New York

ALBANY, N. Y., July 19, 1926—Industrial concerns in Northern New York, particularly pulp and paper mills, are taking a very active interest in the reforestation of waste lands, according to a statement coming from the State Conservation Commission. The Northern New York Utilities Company, a prominent factor in the Northern New York industry, has been a constant advocate of reforestation for a number of years and has made many large plantations on land which it owns. This spring the company planted 540,000 trees in four plantations. In the town of Fine they planted 300,000 white pine and 150,000 Norway spruce and in the Town of Croghan 150,000 Norway spruce and 40,000 Scotch pine.

In addition to the tree planting done by the company J. E. Keib, chief forester, was active throughout the spring and winter in Northern New York in holding meetings in furthering the reforestation movement. In a report which Mr. Keib made to Conservation Commissioner Alexander McDonald he stated that twenty-four meetings had been held during the winter and early spring in Northern New York from Oswego and Rome far north as Malone, these meetings bringing out an average attendance of one hundred. John N. Carlisle, president of the company, carried on a special campaign for community plantings on Arbor Day with the result that 30,000 trees were planted in sixteen communities.

Abandon Water Power Project in West Virginia

CLEVELAND, July 19, 1926.—The Potomac River Corporation of Cleveland, formed to develop water power in the Martinsburg-Harper's Ferry (W. Va.) district, has abandoned the project following a disagreement with the Harper's Ferry Paper Company over an option whereby the power company hoped to acquire the paper company's property valued at between $500,000 and $1,000,000.

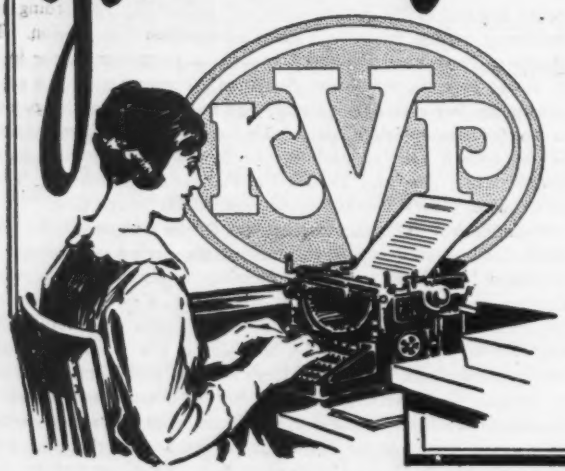
According to Robert J. Bulkley, president of the power company, with offices in the Bulkley Building, the paper company refused to carry out provisions of an option to purchase given to James R. Gloyd, vice president of the Potomac corporation. The Potomac corporation filed suit in the circuit court at Charleston, W. Va., but this action as well as efforts to settle out of court having failed, Mr. Bulkley says the power project will be abandoned. The company planned to supply water power to paper mills and other industries of the West Virginia district as well as to plants in the city of Baltimore.

E. Sutermeister Has Painful Accident

CUMBERLAND MILLS, Me., July 19, 1926.—E. Sutermeister, well-known chief chemist of the S. D. Warren Paper Company, met with a severe and painful accident recently. While he was reaching into the trough of an Oliver pulp thickener to obtain a sample of pulp a cake of thickened stock fell on his arm and carried it into the mixing mechanism. His left arm was broken in two places between the shoulder and elbow and the forearm was lacerated.

With great presence of mind Mr. Sutermeister gave directions for his extrication and walked to the company's first aid room. He was removed to St. Barnabas' Hospital, Portland, and is now recovering. It is hoped that no permanent impairment will result

Uncle Jake says



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Section of the
Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G. MacNAUGHTON, Secretary

Fundamental Problems in the Paper Industry*

By Bjarne Johnsen, Chief Chemist, Hammermill Paper Co.

There have been no revolutionary changes in the pulp and paper making processes for a great number of years; but the manufacturers of Canada and the United States can look back upon the technical developments of the last few years with a great deal of encouragement. The introduction of new and more efficient equipment and improvements in some of the major processes, have resulted in a considerable reduction in waste of expensive raw material, and in the development of a high quality of product, strengthening the position of the industry in competition with that of other countries, which enjoy the advantage of less expensive labor and raw materials.

For many years, scientific institutions, particularly in Europe, have devoted much time and effort to the study of the raw materials and the processes in which these raw materials are used. The industry, however, has been rather slow in taking advantage of the results of such investigations, due to the fact that until only a very few years ago, the mills did not fully realize the value of the services of chemists and chemical engineers of special training, which would enable them to transform into practical uses in the manufacturing processes, data available from scientific institutions. The employment of this service is by no means universal, but it has, in several mills, resulted in the development of technical control of processes, a better understanding of the processes, and improvement and greater uniformity of quality, without which the greatly increased production per unit of equipment would not have been possible. Another result is the greater interest in and support of research work, and, as far as some companies are concerned, active participation in research work separately or in co-operation with other institutions.

Trained Men Needed

There is at present a demand for men of scientific and technical education and training in the pulp and paper industry, and to satisfy the increasing demand, not only for the extension of research activities and control but also for the operation of the plants, will constitute a problem to the industry for some time to come.

It was already mentioned that the adoption of process control had resulted in a better understanding of the processes. This understanding is, however, limited by the actual information that our present method of analysis are able to give. There are still variations in the quality at the different stages of manufacture that are not sufficiently explained, and can not be satisfactorily explained until more scientific methods are devised, which will express more sharply the condition of the cellulose and the nature of so-called impurities, such as residual compounds from the raw materials or degradation products from these or of cellulose, and the value or detriment of their presence in subsequent manufacturing processes.

Testing Methods

Attempts are now being made to standardize some of the methods employed in testing of wood pulps. The paper-making qualities are largely estimated by the effect of mechanical beating upon the strength, and the degree of hydration, of the fibers. But on account of differences in manipulation, the results reported from the various laboratories are not comparable; and while tests of this nature are of course very helpful to the individual mill in judging the value of pulp for its own type of equipment and particular grade of paper, the difficulty in reaching an agreement with regard to the adoption of standard methods of procedure, is probably due to the limited information these tests give.

To a certain extent, this is also true of the method of determining the alpha-cellulose contents of pulps, which is one of the important analyses in determining the value of a pulp for the rayon industry. Scientific men in this country and in Europe have worked on this problem for several years, but have, as yet, not succeeded in selecting one method suitable for adoption as a standard method. And even if one method could be selected that would give consistent results in the hands of different analysts it is hardly permissible to assume that the residue obtained after treatment with a sodium hydroxide solution of given strength and for a certain period, can be considered a uniform product. Resistance to the sodium hydroxide solution does not necessarily guarantee the fundamental structure of the cellulose residue. The copper number, which expresses the reducing quality of the fibrous material, indicates within certain limits the degree to which the cellulosic material has been attacked by hydrolysis and oxidation. But changes may have taken place within the cellulose complex that are not of a sufficiently profound nature to be discovered in the copper number. Still, the nature of such fundamental changes may decide the value of the fiber for processes in which the chemical condition of the cellulose is reflected in the final product.

It is hoped that the excellent research work of fundamental character which is being carried out by Herzog, Hess and others in the laboratories at Dahlem will result in the development of methods that will enable us to express more accurately the fundamental nature of cellulosic materials.

* Paper Read at Dominion Convention of Chemists and Canadian Technical Section, Montreal, May 31—June 3, 1926.

In a recent publication, Dr. Krueger[1] reports on the size and arrangement of the crystallites in cellulose, as influenced by the condition of plant growth and by the industrial process of purification. Krueger finds a difference in the size of these micro-particles in sulphite pulp, sulphate pulp, and cotton, which apparently accounts for the difference in the properties of their esters. The commercial bleaching process reduces the size of the cellulose crystallites in sulphite pulp to two-thirds of the original size. Also, the beating process has its influence upon the micro structure.

These results are apparently based upon a very limited number of samples, in which case it would be premature to draw any general conclusion with regard to the comparative nature of cellulose derived from the various processes. There is still a great variation in quality of commercial wood pulps, depending upon the extent to which control was exercised in their manufacture; and methods that will bring out actual changes to this type in the cellulose itself, are of tremendous importance in the scientific study of industrial processes of purification, and in the analysis of wood pulps and of other paper-making fibers, such as linen and cotton fibers recovered from rags, the analysis of which has so far been very much neglected.

The quality of wood pulp, whether this is the product of the sulphite, the sulphate, or the soda process, depends primarily upon the physical and chemical properties of the particular species of wood from which the pulp is made. Thus the soda pulps, which are largely obtained from poplar, with short fibers and high pentosan content, are of lower strength, and yield considerably more furfural when heated with hydrochloric acid, than a sulphite pulp made from spruce wood, which has a stronger fiber and a lower pentosan content. But there are also great variations in the physical and chemical qualities within each class of pulps, caused by the variation in the conditions under which the pulp was produced. In a general way, the manufacturers have known from experience the factors in the cooking process that influence the quality and the yield of pulp. The United States Forests Products Laboratories, at Madison, have thrown additional light upon this subject during a series of investigations that have been carried out within the last few years, and have established more definitely the effects of varying the cooking conditions in the preparation of sulphite pulp.

Yield and Quality of Pulp

To the pulp manufacturers, the quality and yield are of paramount importance; and their efforts have been directed towards employing less drastic treatment in the cooking process, because this procedure would be likely to result in a higher yield and a better quality as well. However, the efforts of materially increasing the yield by means of the existing processes have been rather unsuccessful, because the removal of the lignin, which is the primary object of the cooking process, for economical reasons has to be accomplished at a high temperature, at which the reaction is accompanied by a rapid hydrolysis of carbo-hydrates of varying degree of resistance.

In speculating over the yield and quality of pulp obtainable from spruce wood in the sulphite process, it may be well to review a recent study by Hagglund[2], in which he gives as the latest figures the following composition of spruce wood:

Cellulose		41.0%	
Other Polysacharides (of the Cellulose type)			Sulphite Pulp 47.1%
Mannose	2.8%		
Xylose	2.1%		
Fructose	1.2%	6.1%	
Hemicellulose, Polysacharides of:			
Xylose and Arabinose		4.6%	
Mannose		9.3%	
Glycose		7.6%	
Galactose		1.1%	
Fructose		Trace	22.6%
Lignin		28.0%	
Rosin, Protein Ash 6		2.3%	
			100.00%

According to Hagglund,[2] it is possible to obtain a yield of 49 percent of pulp of high purity, containing only a small amount of lignin and rosin, by removal of which, the yield of pure pulp would be reduced to 47 per cent, of which 41 per cent is pure cellulose and the remainder, 6 per cent, consists of polysacharides of the cellulose type.

Hagglund also states that at the various stages of the sulphite cooking process, there exists a relation between the amount of dissolved lignin and reducing sugars in the cooking liquor of two to one, which would indicate a combination of lignin with carbohydrates in the original wood. But the total amount of carbohydrates dissolved in the cooking process, is larger than is indicated by the amount of reducing sugar substances, and would, in a more or less ideal example as discussed by Hagglund, amount to about 23 per cent of the weight of the wood at the completion of the cook. The fact that considerably lower yields are often experienced, and that lignin can actually be completely removed with less destruction of sugar, indicates that the yield is very largely dependent upon the extent of carbohydrate removal, which again is dictated by the factors influencing the rate of hydrolysis. The temperature being the most important factor, the hydrolyzing effect is to some extent reduced by reduction of the maximum temperature and extension of the cooking time. There is, however, an economical limit to what may be accomplished in respect to increased yield by lengthening of the cooking time, and future efforts will probably be directed more toward control of the H-ion concentration, and the employment of catalysts that will permit the solution of lignin at a low temperature.

From practical experience as well as experimental data, it appears that SO_3 as well as the base, are removed from the cooking liquor at a comparatively low temperature, and in a quantity that would indicate a concentration of these chemicals in the wood. This suggests the formation of lignin compounds with sulfite, which, however, are not readily soluble in water or in the cooking liquor at the low temperature. A study of the solubility of these lignin compounds might yield valuable information and result in material benefit to the industry. In fact, it is already known that the use of a certain amount of relief liquor has a beneficial effect upon the dissolving quality of the cooking liquor.

A high yield is also claimed for the mono-sulphite processes. It must, however, always be remembered that the quality of the fiber naturally, is affected by such changes or modifications of the cooking processes.

Pulp for Rayon

For the manufacture of rayon, a pulp of high alpha-cellulose content is desirable. A pulp that has been obtained in high yield by careful cooking, contains a large amount of polysacharides other than cellulose that are soluble in strong sodium hydroxide, and their presence, therefore, results in a low alpha-cellulose content of the pulp. Similarly, a low alpho-cellulose content of the pulp may be the result of very drastic cooking, during which alkali-soluble compounds were formed. But, assuming that the alpho-cellulose content in the two pulps is the same, it is hardly to be expected that the two pulps would be of equal value to the silk manufacturer, as it is very likely that the cellulose in the latter pulp has been changed to a greater extent than in the former one.

If we compare the value of these two types of pulps for paper-making, we find that the former will hydrate easily in the beating process, and the strength will gradually increase to a high maximum, while the latter pulp, containing degradation products, will hydrate rapidly, and the maximum strength, which is lower than in the former pulp, will be reached in an early stage of the beating process, after which the strength will rapidly decline.

The two types of pulps mentioned represent extremes. Between these classes are different types of pulps, characterized roughly

[1] Krueger. Papierfabr. 23, 767-768 (1925).

[2] Hagglund. Papierfabr. 23, 399-405 (1925).

by their solubility, strength, and hydrating quality. The non-cellulose compounds in the two types are of a different nature; in one case, consisting chiefly of residual polysacharides originating in the wood; and in the second case, of decomposition products of these and of cellulose. To what extent these substances assist or interfere with paper-making process, such as the sizing process and the coloring process, has not been satisfactorily investigated. Observations in our laboratories show that the cooking process has a decided bearing upon both of these processes.

The Sizing Process

The effect of the condition of the fiber upon the sizing process, has recently been discussed by Oman[3], who develops his theory of sizing on the basis of the electric charges of the cellulose fibers. Oman finds that sulphite fiber in contact with weakly acid solution, has a positive charge, and that the H-ion concentration of this solution, as a result of the contact with the fiber, is changed towards the alkaline side. The iso-electric point of sulphite pulp does not occur at the neutral point, but on the acid side; while the iso-electric point of sulphate pulp is on the alkaline side. The pulps are amphoteric substances, and the iso-electric point is displayed by contact with solutions of varying H-ion concentration. In practical experience, it is found that there is a difference in the sizing quality of sulphate and sulphite pulps, and it is reasonable to assume that the variations in sizing obtained in the mills with pulps of either class, is due more to the chemical condition of the fiber than is generally appreciated. The fact that cellulose fibers are so sensitive to surrounding conditions that their electric charges, and thereby their reactivity, may be changed even in the washing processes, is of interest not only for the sizing process but in other paper-making processes. To what extent the hydration of a given pulp is influenced by the composition of the water in the beater, has not been thoroughly investigated; but a study of this problem is a very important one, when we consider the enormous amount of power required even with the most efficient mechanical equipment. Some preliminary experiments carried out in our laboratories by C. H. Reese, show that the rate of hydration of unbleached and bleached sulphite pulp by mechanical beating, is influenced by the H-ion concentration of the water, and that the most rapid hydration depends upon the acid used. It is also found that the H-ion concentration during the beating time changes toward the neutral point.

Temperature and Hydration

The effect of temperature upon hydration is very marked, the rate of hydration increasing with decreasing temperature. As a consequence of this, there is a considerable difference in beating effect due to the seasonal changes in the temperature of the mill water, a condition which has to be met either by additional beating time or by other means, if a continuously uniform quality is desired.

Bleaching

One process in the manufacture of pulp that has recently received much attention, is the bleaching process. The efforts have been directed chiefly toward the development of mechanical equipment that would permit the bleaching to be carried out at a high density and low temperature, the purpose being to save heat and power. These efforts have resulted in various new types of bleaching equipment, which must be considered a great improvement over the old types.

Also, the study of the reactivity of the bleaching solutions, particularly by Schwalbe, Wenzl[4] and Kaufman[6], has thrown more light upon this process. However, the literature on this subject is still of such a contradictory nature that considerably more research work is needed before we can arrive at definite conclusions as to the comparative merits of the stock concentrations, temperature, and composition of the bleaching solution.

An investigation is being made by John L. Parsons in our laboratories at the present time, and the results so far show that by increasing the consistency of the pulp from 5 to 10 per cent, the bleaching time is reduced 40 per cent; and if the consistency is increased to 15 per cent a saving in time of from 45 to 50 per cent is accomplished. There is, however, no material saving in chlorine effected by increased concentration. It has also been found that the chlorine is consumed very rapidly in the very first stage of the process, and that 95 per cent of the total chlorine is consumed within 50 to 55 per cent of the total bleaching time. This corroborates the results obtained by Curran and Baird[7] at low concentrations. In some recent experiments reported by Wenzl[8], the chlorine consumption is considerably less rapid, which may be ascribed to a difference in the composition in the bleaching liquor. Wenzl showed that the presence of carbonate and hydroxyl ions, as well as certain salts, have a retarding effect upon the rate of chlorine consumption in the case of sodium hypochlorite solution. Comparing the results of Wenzl's experiments with those carried out in these laboratories, it appears that the rate of chlorine consumption is more rapid with calcium hypochlorite than with the sodium salt. Preliminary experiments have shown that the pH value decreases very rapidly during the initial stage of the bleaching process, and that the solution after a short period gives a distinctly acid reaction.

It is generally conceded that a material saving in bleach can be effected by bleaching in two stages, which permits the removal of dissolved decomposition products by washing after the first stage. From Wenzl's experiments, this was not apparent, however, and it was therefore considered advisable to include a study of this phase of the subject in our laboratories. Using calcium hypochlorite solution as the bleaching agent and an easy bleaching pulp, it was found that there was a bleach economy of about 15 per cent, but that the total bleaching time was actually longer than in the single-stage bleaching. The experiments were carried out at a pulp consistency of 10 per cent.

The advantages of reducing the space requirements by reducing the bleaching time is of course apparent; but it is also necessary definitely to establish the effect upon the cellulose fiber by the partly exhausted bleaching liquor.

It has been attempted in this paper to demonstrate by means of a few practical examples how paper-making progress are influenced by the predominant nature of the substances that compose wood pulp, whether these are cellulose, other residual polysaccharides, or their decomposition products resulting from the manufacturing processes. The development of more exact methods of analysis of these compounds will, however, be of fundamental importance to the paper-making processes, and will undoubtedly assist in the development of new industries, based upon the enormous supply of raw materials represented by the Canadian Forests.

[3] Oman. Papierfabr. 23, 725-727, 745-748, 800-802, 813-816 (1925).
[4] Schwalbe and Wenzl. Papierfabr. 20, 1626 (1922); 21, 268 (1923); 22, (1923); Z angew. Chem. 36, 302, (1923).
[5] Hagglund. Papierfabr. 23, 399-405 (1925).
[6] Kauffman. Z. angew. Chem. 37, 364-368 (1924).
[7] Curran and Baird, Paper Trade J. 79, No. 11, 45-47 (1924); 80; No. 16, 51-52 (1925).

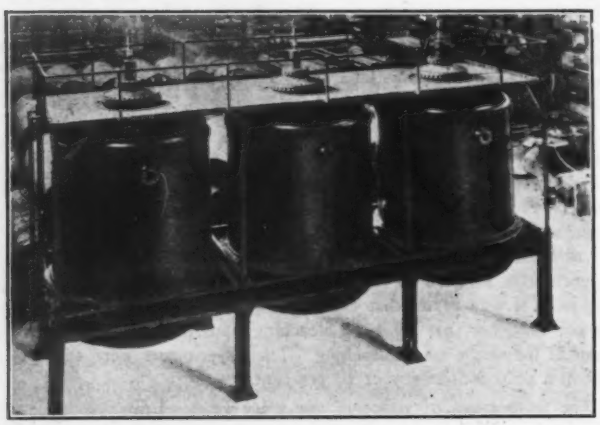
Crocker, Burbank & Co. To Build

FITCHBURG, Mass., July 19, 1926.—A new three story plant for manufacturing stock and storage is planned by the Crocker, Burbank & Co., Inc., according to an application for a building permit filed in the office of Building Inspector Joseph D. O'Keeffe. The building will be erected on Westminster street opposite the company's mill No. 4, known as the Hannah mill.

The building will be three stories in height and its dimensions will be 170 by 120. It will cost approximately $75,000, according to the application. Wiley & Foss are the architects and contractors. Representatives of the company said today that their plans are not yet sufficiently complete to give out a statement.

Advancement in the Use of Electric Power for Steam Raising

The photograph illustrates the largest electric steam boiler ever built, now installed in the plant of Price Bros. & Co., Ltd., of Kenogami, Que. It is of the Kaelin type, the sole rights for which in U. S. A. and South America, are again in the hands of Frank Hodson, Consulting Engineer, Jefferson Bldg., Philadelphia, Pa. Mr. Hodson, who originally introduced these boilers into U. S. A., advises us that this particular boiler is designed to operate directly on 13,200 volts current and has a capacity of 32,000 kw. and is capable of producing 100,000 pounds of steam per hour at the required pressure. The tanks are 9 feet 6 inches diameter by 10 feet 6 inches long on parallel and it will be seen that the whole unit, equal to 3,200 boiler horse power, occupies a minimum amount of room as compared with fuel fired boiler equipment of the same capacity. There is also no comparison in the initial cost of the two types of installation. The thermal efficiency of this boiler is expected to be between 96 and 98 per cent—the boiler shell can be thoroughly insulated—the water itself acts as the resistor so all the electric current put into the tanks is usefully employed in generating steam. The only B.t.u. losses are those occasioned by occasional bleeding the boiler to free the tanks from sediment that might accumulate.



INSTALLATION AT PRICE BROS. & CO., LTD.

"Kaelin" Type Electric Steam Boiler, 32,000 kilowatt capacity or 50 tons of water to steam per hour. Designed to operate on 13,200 volt power.

The progress made in electric boiler design and construction in the last few years has been remarkable and 95 per cent of the installations on this continent have been of the Kaelin type—originally developed by F. T. Kaelin, chief engineer of the Shawinigan Water and Power Company. Upwards of 500,000 kw. of this type of boiler have been installed in the last 4 years—a phenomenal growth of a new industry. Amongst other notable installations might be mentioned those of the Niagara Falls Power Company, Brown Company, Berlin, N. H., International Paper Company, Ford Motor Company, Newfoundland Pulp and Paper Company (100,000 kw. electric boilers installed), Abitibi Power and Paper Company (20,000 kw.), Washington Pulp and Paper Corp., Washburn Crosby Company, Heart's Delight Farm. A number are in successful operation in South America—in one case a Kaelin electric steam boiler sold to Grace and Company is operating in the interior of Peru in Cuzco, the ancient center of civilization of the Incas. It is used for producing all the steam required in a wool producing plant. Formerly fuel had to be carried many hundreds of miles.

The electric steam boiler has a wide variety of uses, wherever electric power is cheap enough and a use for steam exists. There are, in a great many districts where steam is used in different processes, times when there is more water available for generating power than the demand for power. Such excess of water can be used to generate power and the power converted by a Kaelin electric boiler into steam. Some of the boilers in use produce all the steam all the year around for the plants. Others are tied into existing fuel fired boiler systems and only come into operation when there is excess of water or power available, when they automatically cut down the fuel fired boilers—others operate at week ends only when part of the mill is shut down and spare power available from this source. As the actual amount of water in the tanks at any one time is very small, it requires only a very few minutes to get the boilers up to steam producing load and this fact is taken into account in tying in electric boilers as a means of ensuring a steady works demand for power. The valleys in the power demand are automatically switched on to the electric boiler, steam is produced in such intervals, and when the ordinary mill demand increases above a pre-set figure, the electric boilers are cut out.

In cases where works or plants buy blocks of electric power have a use for steam for heating or process work of any kind, and do not have a steady demand for the power they buy, the electric boiler will ensure full economical use of the power they are paying for.

The electric boiler requires little or no attention—one man can attend to a 100,000 kw. set and he has little to do beyond watch the gauges from time to time—the amount of power used and the amount of steam produced are both governed by the height of water in the tanks and this can be set by simple adjustment of the incoming feed water. There is no heat or noise and there is little to show whether an electric boiler is in operation or not, except the figures on the control instruments.

There are undoubtedly very many places where such boilers can be installed with advantage and effect immense economies on fuel, labor, space, initial cost, and operating cost.

New Catalogue on the Tracyfier

Andrews-Bradshaw Company, Pittsburgh, Pa., has just prepared a 48 page fully illustrated catalog on the Tracyfier (Tracy Steam Purifier and Tracyfier Gas and Vapor Scrubber). It covers the necessity for cleaning steam and the benefits to be derived from the use of steam that is entirely free from boiler water or rust. The construction of the Tracyfier is clearly shown and its principles of operation are carefully outlined. The catalog includes a discussion of the effect of boiler water treatment and blow-down on steam quality. A section describes the application of the Tracyfier Gas and Vapor Scrubber.

L. F. Kuhman has been appointed vice president and director of the Andrews-Bradshaw Company, sales managers for the Tracyfier.

Mr. Kuhman has been associated with the company for the past three and a half years. For eight years prior to that he was engaged as sales engineer for the Ingersoll Rand Company in the Pittsburgh district. Mr. Kuhman is a Carnegie Tech man.

New Superintendent of Berwin Corp.

DANSVILLE, N. Y., July 19, 1926.—E. V. Krom, formerly superintendent of the plant of the Sweet Brothers Paper Manufacturing Company at Phoenix, N. Y., has accepted the superintendency of the mill of the Berwin Paper Corporation here.

New Type Farrel Roll Grinder

A new type roll grinder for grinding long rolls has recently been announced by the Farrel Foundry and Machine Company, of Ansonia, Conn., builders of large roll grinders for over forty years.

The grinding time has been reduced from one-third to one-half that formerly required, at the same time maintaining accuracy of grinding to one-quarter of a thousandth of an inch. Many new developments have been incorporated, such as the new crowning device, geared head drive and automatic lubrication.

The machine illustrated is a 36 x 260 inches grinder of the new type recently installed in Canada.

Two grinding wheels 20 inches in diameter are mounted on the well-known Swing-Rest Principle, which Farrel claims is essential for the accurate grinding of long rolls. Each wheel is driven by a 7½ h.p. motor furnishing sufficient power to crowd the wheels to their limit. This power combined with the massive construction of the carriage accounts to a large extent for the tremendous increase in production. In fact, the removal of stock is limited only by the wheels themselves.

The new crowning device which is unique in design and unlike any other crowning device, is simple to operate and absolutely accurate. A circular cam driven by a rack and pinion, as the carriage traverses the bed, throws the wheel toward and from the work center by lifting the wheel heads from the back. The cam is connected in such a way that all unnecessary link connections have been eliminated and moving parts reduced to a minimum. No springs or tension members are necessary as there is no backlash to be overcome. Any crown from 1/1000 to 300/1000 inch, or more, can be obtained by the turning of two screws and the adjustment of a third. A scale mounted directly in front of the operator determines the crown in a fraction of a minute. All variable factors have been eliminated, thus giving an exact shape each time without trial. Short rolls can be set for crowning as easily as long rolls since the roll does not have to be placed midway on the bed. This saves time in setting up. A control lever disengages the crowning device when changing to straight grinding.

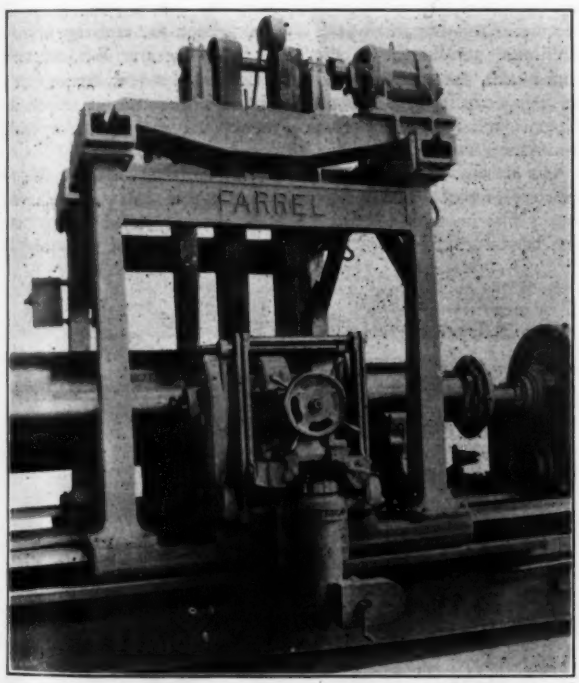


FIG. 1
Closeup of Carriage showing the New Grinding Device.

Another new and interesting feature is the geared head for driving the roll. All silent chains have been eliminated and the motor direct connected through a flexible coupling to the head. Sykes Herringbone Gears, completely enclosed, take the place of chains, and give a smooth positive drive for the rolls. All gearing is enclosed and automatically lubricated from a pressure pump. Individual oil lines to all bearings as well as all gears relieve the operators of caring for this unit, and years of life are added to the bearings. The photograph shows the head with case removed.

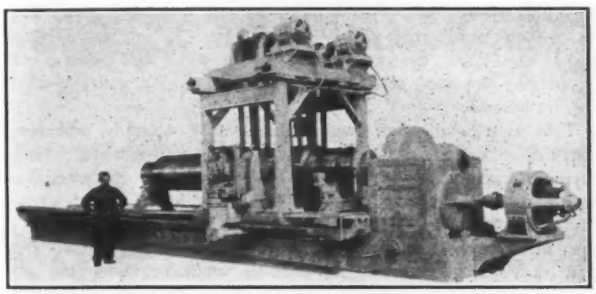


FIG. 2
New Type Farrel Roll Grinder 36" x 260".

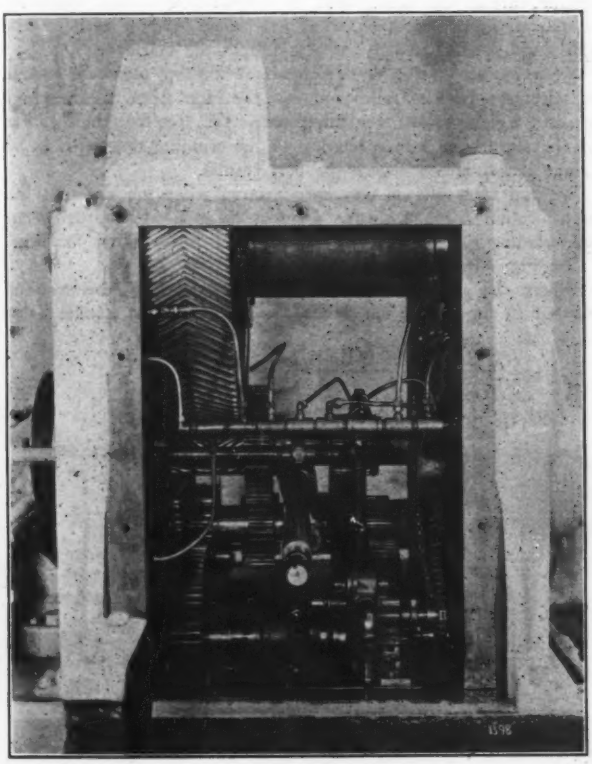


FIG. 3
Closeup of Geared Head with Cover Removed Showing Forced Lubrication System.

The same pump which lubricates the head also supplies oil to the ways on which the carriage rides. These, instead of being the conventional "V's" are of the inverted "V" type (Λ), whereby oil is delivered to the apex of the "V" at short intervals. The oil runs along a channel in the apex and overflows the sides, carrying with it all dirt and grit.

Slitting and Winding Paper

Importance of Correct Location of Slitters in Slitting and Roll-Winding Machines

By James A. Cameron

Whatever is said in this article on matters relating to the slitting and roll-winding process in Paper and Board Mills will have to be bullet-proof or it will be shot to pieces by the men in those mills who know by experience "what's what and what's rot" in judging the good and the bad points in slitting and roll-winding machines.

This article will not concern itself with a study and comparison of methods of slitting or methods of roll-winding. These methods have been sized up and quite thoroughly discussed and compared in an article entitled, "A Study and Comparison of Methods of Slitting and Winding Rolls of Paper and Board;" also in an article dealing quite thoroughly with slitting methods, with only casual reference to winding methods, under the title "Slitting Methods Compared." Both of these articles have been reprinted in pamphlet form for free distribution to those who may be interested in these subjects.

In this present article the topic will be more particularly a discussion of the correct positioning or location of the slitting apparatus with respect to the winding apparatus.

A slitting and roll-winding machine has to have some kind of slitting means and some kind of roll-winding means operating in unison. There must be, of course, some kind of reel or mill roll stand from which the web is fed to the machine.

In the matter of slitting methods and winding methods, it will be necessary here to touch only on the high spots, as the chief topic in which we are now interested is the fact that the location of the slitters in proper relation to the winding apparatus is of prime importance to secure the best results.

We can start off on very safe ground when we say that the best location for the slitting element is as near as possible to the winding element in any slitting and roll-winding machine. See Fig. 1 and Fig. 2.

Where the slitting is done close to the winding, the sections into which the web is slit do not have a chance to wander sideways from a straight path, nor to stretch unequally so that one section may run taut and another not so taut, or possibly quite slack, in traveling the distance from the point where the slitting is done to where the sections are wound up into rolls.

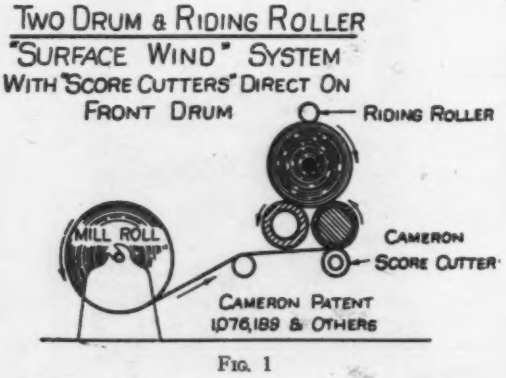


FIG. 1

Looking at the matter the other way around, the slitters when placed at a distance from the winding drums, usually in the rear and high up, are then in a position where the slitting must be done at a point fairly close to the reels or mill roll. See Fig. 3. When the slitting is done in this location, one of the results is that it is necessary to have a very considerable drag or brake-friction on the reel so as to flatten the web and keep it quiet and reasonably free of vibration just as it comes off the reel, in order for the slitters to do their work.

Paper is nothing more than an interlocking mass of fibres; and the more it is stretched, or the more punishment it has to endure in being drawn, first of all, through the paper-making process, then off the driers and through the calenders and over to the reels, and then afterwards over to the winder—the weaker it becomes. Each step involves a drag or tension and consequently an additional punishment to the sheet. The greater this repeated punishment, the weaker the resistance becomes and consequently there is more liability to breaks in subsequent processes where the paper is utilized, as, for instance, in web presses, coating or other converting machines.

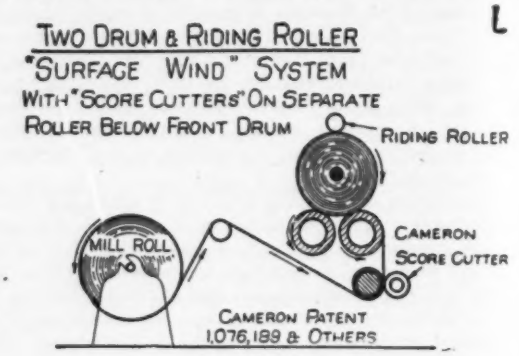


FIG. 2

The placing of the slitters near to the reels, as shown in Fig. 3 which represents the average location in the old style winders, means that an unnecessary amount of drag is called for to take the flap or vibration out of the sheet and flatten it smoothly so that the slitting can be done properly. If, on the other hand, the slitters are very near to the winding drums, as shown in Fig. 1 and Fig. 2, the web passes over the surface of several guide rolls before it reaches the slitters; and this in itself tends to quiet down the web to a smooth, level draw, without very much tension being necessary on the reels.

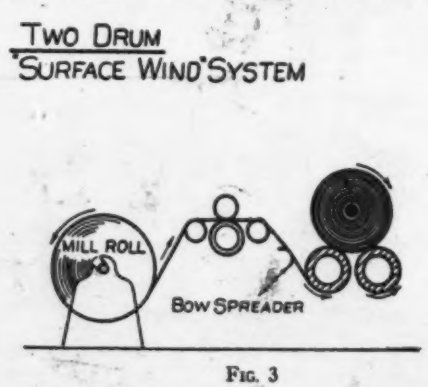


FIG. 3

Always keeping in mind that what we are chiefly considering in this article is the proper location of the slitters with respect to the winding means, it is still necessary to speak briefly of the slitters themselves.

Referring for a moment to the various kinds of slitters in

use, it is to be noted that they may be summed up in three major classes. In one class falls the various kinds of rotary or overlapping shears, where two revolving shear discs have their edges slightly overlapped, and the paper is slit in passing between them—the "rotary shear" as it is sometimes called. See Fig. 4.

In another class is the camachine "Score-Cut" method, developed by the writer's company and covered by exclusive patents. Here the slitting is done on the surface of a flint-hard platen roll built up of sleeve sections being mounted on a core shaft, with inner ends abutting so as to make a perfect surface roll with invisible joints between the several sections. (See Fig. 5.) The paper passes over the surface of this platen roll, which is power driven at the same speed as the travel of the paper, and the slitter wheels which have a V-shaped edge are spring-pressed in contact with the paper. (See Fig. 6.) They cleave it apart on a hair line, leaving the edges of the slit sections of paper lying smoothly side by side on the surface of the platen roll, undistorted in any way as they pass forward to the winding drums. (See Fig. 7 and Fig. 8.)

The third method is what is commonly known as the "Top-Slitter," where the paper is actually wound on the roll first and and then converted into strips by saw-tooth blades held in collars and mounted spacably on a power-driven shaft. The slitters press with considerable weight on top of the roll of paper, and are driven at a higher speed than the surface of the paper. The blades thus literally saw through the sheet. (See Fig. 9.) We need give no further consideration to the Top Slitter method as it is rapidly becoming obsolete due to the fact that the width of the trim necessary at the ends of the roll is excessive; and the slitting is so damaging to the edge of the sheet that this method is not practical for the great majority of requirements, aside from the further fact that even moderately high speed is impossible.

The reason for referring to slitting methods at this point is that the rotary shear method is seldom applied to slitting and roll-winding machines except in a position at the rear of the winding drums (as shown in Fig. 3) which is to say, quite near to the reels. This position of the slitters is resorted to for the reason that a considerable length of draw is necessary in order

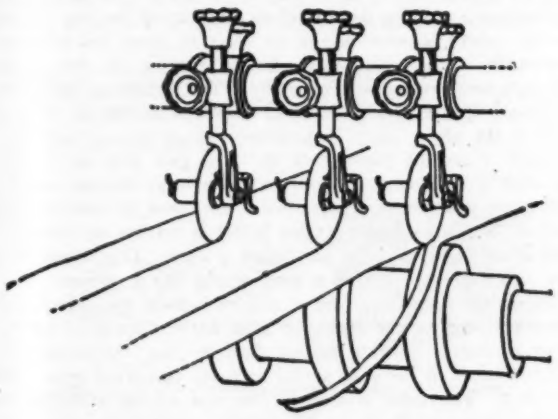


FIG. 4

to separate or spread apart the slit sections before winding.

It is to be noted that in order to slit the sheet of paper by the rotary shear method, it is necessary that it be almost as taut as a drum-head as it passes between the overlapping blades of these slitters. There is nothing to support the web at the point where it is slit, except the under shear blade which holds up one edge at that point while the upper blade shears through it, and incidentally pushes the other edge of the web downward by as much as the shear blades overlap. This leads to a slight stretching of this edge. To make a reasonably clean-cut job, it is necessary that the sheet be drawn quite taut and that the slitters be maintained in a sharp condition as to their slitting edges.

It is not always possible to draw the sheet taut at the extreme edges on each side, even though the body of the sheet may be perfectly taut; and it is increasingly hard to do so where the slitters are located so that they trim the edges of the web just as it leaves the reels. This leads to a condition where it is often neces-

FIG. 5

Flint-hard "Score Cut" Roller made up of steel alloy sleeves mounted on core shaft (Patented).

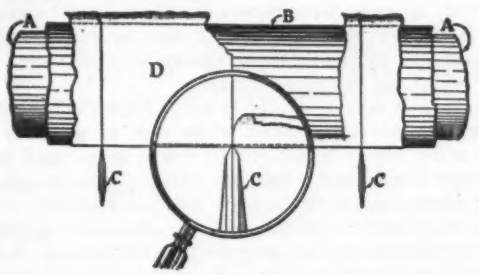


FIG. 6

(A) Core Shaft for mounting sleeve sections of Slitter Roller. (B) Flint-hard polished steel surface of Camachine Slitter Roller. (C) Camachine Slitter wheel mounted on Ball Bearings. (D) Material being slit by Camachine Score Cut method.

sary for the shears to be set a substantial distance from the deckle edge, making a considerable amount of waste; but even with a level draw at the edge, the excess tension factor is al-

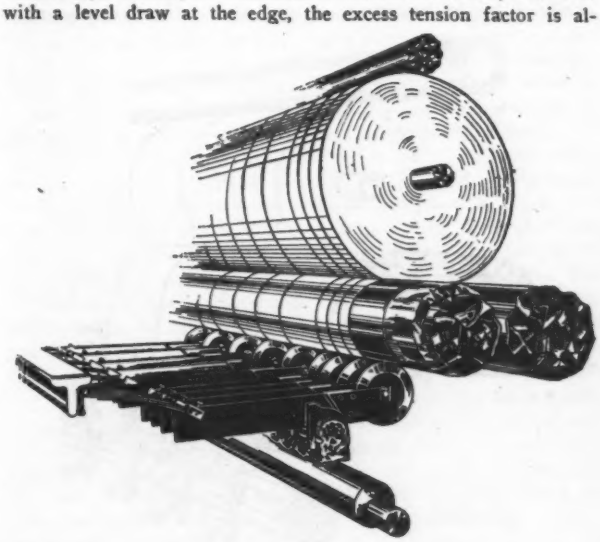


FIG. 7

Camachine "Score Cut" Slitter as applied to webs up to approximately 80" width (Patented).

ways present and always aggravated by the fact that the rotary shear is usually located at a distance from the winding drums, which brings the slitting operation too near to the reel. This means a regrettable amount of punishment to the web, due to the fact that the slitters are of the nature described, requiring, as they do, a more taut sheet than either of the other methods; and to the additional fact that they are usually located in a position near to the reels, where it is necessary to quiet and steady the sheet by an extra heavy drag at the outset to avoid a choppy edge.

As to the slitters being located too far away from the winding drums, that is a matter of necessity where the rotary shears are used, for it is necessary to introduce a bow spreader to separate the slit sections as they pass from the slitting to the winding. It takes quite a considerable length of draw to effect this separation. The effect of the bow spreader itself on the surface of the sheet will be briefly mentioned later on. Right here we will mention the fact that the web being slit at a distance from where it is wound, brings on a situation where one or another of the slit sections might become slack, more or less; and in that case additional tension must be piled on to the one or more sections which are already drawing taut and level. Here we have a case of too much tension at the very start because the web is slit too near to the reels, and then again the necessity of too much tension because the web is slit too far from the winding drums. By "too much" is meant more than is really good for the web. In most cases the web "stands the gaff," and in some cases it does not; but in all cases it must be weakened to a certain extent in proportion to the amount of unnecessary drag or draw strains that are imposed upon it.

The familiar type of winder in use is known as the two-drum winder with the rotary shears at the rear, as shown in Fig. 3. It has many forms. Sometimes the drums are of equal diameter, sometimes one is larger than the other. There are also other minor differences, but this type of winder is essentially the same in the main outline. Machines of this class are familiar to all practical mill men, as they were the only reliable type of winders available for dependable work prior to the advent of the Camachine series of paper and board mill winders.

Points of importance in the design and operation of the old style two-drum winders and the Camachine series of winders, are summed up quite fully in the article already referred to—"A Study and Comparison of Methods of Slitting and Winding Rolls of Paper and Board," prepared by the author after long study on winder matters.

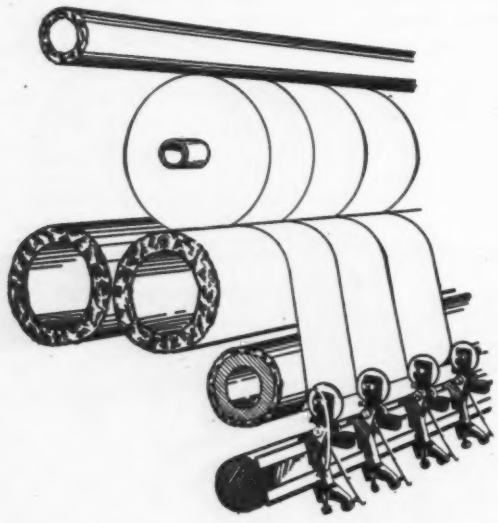


FIG. 8

Camachine "Score Cut" Slitter as applied to Camachines 12-14-18 (Patented).

Now we will pass to another phase of the importance of the correct location of the slitters with respect to the winding drums.

Reference has been made to the bow spreader which is familiar to all mill men as a means of separating the slit sections after they are slit and before they are wound. It must be borne in mind that when the web of paper is divided into a number of slit sections by the rotary shear method (the one commonly used on machines other than those embodying the Camachine score-cut slitters), these sections must pass over some spreading means—the bow spreader—before the sections are wound up.

By "bow spreader" is meant a semi-round bar or section of pipe or a board sprung to a curved line with adjustable means to spring it more or less and at various places along its length; so that when the web of paper passes over it, the surface of the paper is bowed outwards to a greater or less degree. This system of spreading actually effects the separation of the slit sections of the web when properly adjusted and watched, but it cannot

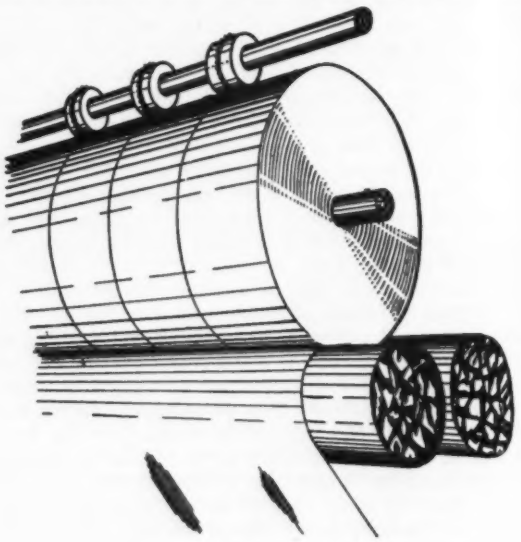


FIG. 9

"Top Slitter"—Material slit after it is on the roll.

do anything but harm to the paper itself. If three sections are being slit from the original web, then the center of the three sections passes over the crown of the bow and is necessarily stretched and weakened to some degree throughout its middle portion. The other two sections, one on either side, are stretched on their inner edges and proportionately weakened where this stretch has occurred. There has not been sufficient thought and investigation given to this stretching tendency of the bow spreader, which injures in some degree the sheet of paper for subsequent processing such as supercalendering, coating or for passing through web presses at high speed. The stretching also affects adversely the tendency for sheet paper to buckle or bulge or curl at the edges.

Aside from the punishment the web gets just as it leaves the reels in passing to the slitters under heavy tension, added to this is the punishment it gets when it goes over the bow spreader, and the long draw under tension before it reaches the rolls—thus adding agony to grief for that paper to face. This is something that any paper-maker with a heart would like to prevent.

Where the four-drum type of winder is used, the objectionable Bow Spreader can be dispensed with, but the draw of the web after slitting is even a greater distance than the already too great distance in the case of the ordinary two-drum type. (See Fig 10.) The same is true in the case of the multiple-shaft winder shown at Figure 11—the slitters must be mounted at an extra distance from the point where the winding is done, the same as in the case of four-drum winders.

In the case of the four-drum system of winding, the necessary use of the bow spreader is not present, as the actual separation of the rolls is accomplished by winding them each on a separate shaft, alternating them from the forward to the rear pair of drums. But the incorrect location of the slitters is aggravated somewhat, and the long draw and uneven strains on the separate sections of the web are more pronounced than in the ordinary two-drum type of winder; The slitters, however near they may be to the rear pair of drums—and they never are very near—could not be near to the forward pair of drums. It is

the same old thing over again. The slitters are at the rear and near to the reels, requiring a drum-taut sheet to do their work properly; and what is possibly worse than the Bow Spreader as used in the two-drum Winders, is the fact that in the four-drum type of Winders the individual sections of the web draw to what might be described as two different winding machines. The forward pair of drums is a complete winder and the rear pair of drums is a complete winder; and however skillful the operator, it is scarcely possible to get an even amount of draw tension on each of the separate sections. Even on a single pair of drums with slitters at the rear, the severed sections of the web can not all draw smoothly to the point of winding; but in the four-drum type additional trouble is borrowed by drawing the sections to two pairs of drums alternately. Some rolls are too hard and some not hard enough.

This system of winding, using the four drums, was developed to escape the bow sprayer as a separating means, by winding the rolls separately so they could not adhere to each other. It accomplished this result, but at an expense of using two winding machines instead of one, also at the expense of additional labor and a further invitation for the sheet to go wrong in its travel through a proportionately greater distance from where it is slit to where it is wound into rolls. What is worse yet, it increased the tendency to breaks and consequent splices, aside from tending to excessively hard-wound rolls in some instances. It is only in a limited number of mills that this system is tolerated. It must not be said that acceptable rolls cannot be made by this method, but it must be said that they can be made only under unnecessary handicaps and expensive operating conditions. For high speed roll production behind the most modern paper machines, it is impracticable altogether.

As to the multiple-shaft method of winding, it is open to substantially the same objections as in the case of the four-drum system, plus its own defects and contributions to trouble sources. It is not worth further discussion here, as it has been abandoned in almost every instance, except in a few board mills where this method is giving acceptable results because the character of the rolls produced is not a necessarily important item.

We started out with the statement that we were on safe ground when we laid down the principle that the slitting should be done as near as possible to the point where the winding is done. We have been at pains to point out that in the ordinary types of winders the location of the slitters is open to objections already commented on. In the top slitter method illustrated at Fig. 9 we note that the web is actually wound on to the roll before the slitting is done, to escape from the difficulties of the Rotary Shear method and the necessary positioning of this type of slitter at a distance from the winding drums. In theory, the position of the Top Slitter with respect to the winding is admirable, and it is regrettable that certain practical difficulties impair the usefulness of this device. The slitting is necessarily a buzz-saw operation, leaving the edges of the web unsightly as already mentioned. If the pad under the slitters is not firm; that is to say, if there are any soft spots in any portion of the surface of the roll, the slitters will not function properly. Furthermore, a wasteful quantity of trim must be taken off each deckle edge of the web, for the slitters will not work right near to the edge. For these and other practical reasons this method, although it served a good turn in its day, did not gain permanent favor.

F

FOUR DRUM-MULTIPLE SHAFT
SURFACE WIND SYSTEM
SEPARATE SHAFT FOR EACH ROLL

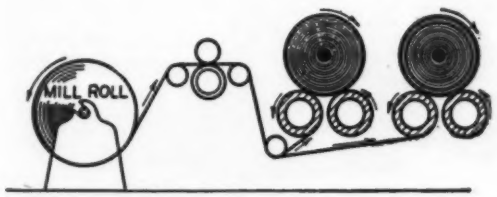


FIG. 10

MULTIPLE SHAFT
CENTER WIND SYSTEM
SLIP BELT DRIVE TO EACH SHAFT

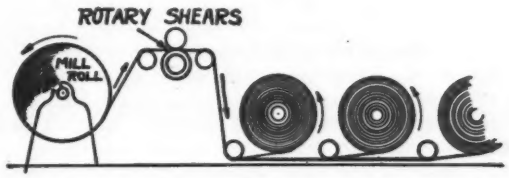


FIG. 11

We will now pass to a brief consideration of a method of slitting which lends itself to a proper positioning with respect to the winding means, and which permits the lessening of tension and other punishment to the web, both in the matter of slitting and in the matter of winding; that is to say, the Camachine "Score-Cut" method referred to above.

In the case of smaller types of machines such as used for finishing room service and in plants converting paper into its many products, the platen roll against which the slitting is done is really one of the two winding drums, as shown in Fig. 7. In other words, the paper is actually slit on one of the drums over which it passes as it is going on to the roll. In some respects that is the best possible location for a slitter; but when it comes to the high speed mill type machines which the writer's company builds, covering all requirements as to web width and speed, it is not practical to make the platen roll of sufficient diameter to be used as a winding drum, without unwarranted expense. In these mill type machines the platen roll is therefore placed below the first drum with which the paper contacts—the "forward drum" or "front drum" as it is variously called, as shown in Fig. 8.

In this position of the platen roll the slitting takes place less than one foot from where the web contacts with the first winding drum. In the interval between the slitters and the first winding drum there is no chance for the web sections to wander sideways, nor to stretch or run slack. Give them time and they are apt to "start something," but here they do not have a chance.

When the web sections reach the first winding drum after traveling across this narrow gap, they are in much the same condition as though they were still joined together in the original web before it was slit. To all appearances the web is a solid unit. The edges of the sections are side by side and unruffled, and they are not stretched or frayed. This could not have been the case had rotary shears been used to do the slitting, even it there were no practical difficulties in their operation in a location so near to the drums.

To make doubly sure that the edges of the sections do not override each other or interweave or run together, as it is variously expressed, with the result that the rolls will not separate, a patented system of grooving has been machined into the surface of the first drum over which the web passes. This grooving is graphically illustrated in Fig. 12.

The paper or paperboard conforms temporarily to the very shallow depressions and very mild ridges of these drum grooves which run spirally around the drum from the center out, right and left, or some times sinuously or wobbly around the circumference of the drum. The result is that the actual width of each

web section is minutely shrunk temporarily as it goes on the roll. This keeps the edges slightly apart and the rolls cannot interlock in the normal operation of the machine. The separation between the rolls is slight, to be sure, but it is complete; and a miss in this case is better than a mile, for each roll helps to guide and support the neighbor on each side as they all build up in diameter. This fact of mutual support is especially helpful when many comparatively narrow rolls are wound. When very narrow rolls are required, which is sometimes the case even on paper machine winders as well as finishing room winders, this grooving, coupled with the fact of the rolls all being wound side by side in a single shaft, makes such a task quite a simple one, within the reach of any of the machines using the socalled Camachine system of slitting and winding.

The basic factors of the "Camachine Principle" are—a correct method of slitting, a correct location of the slitters, coupled with a correct method of winding. All these "corrects" are relative. No method of slitting which will slit at all is "wrong;" it is just not "right"—and the same applies to the location of the slitters or to the various winding methods. The old two-drum winders with the web threaded up between the drums, and the Siamese twins of the same family—the two two-drum winders better known as the four-drum machines), or the ancestor of them all—the multiple-shaft winders, are none of them "wrong." Those who developed them did a real helpful service to the industry, but they had to stop working out winder problems and go on with a hundred-and-one other problems in paper machine design and related machinery; as they could not, or at least did not, confine their efforts exclusively to winder development.

The importance of the roll-winding operation definitely fixes the status of the roll-winder as an important piece of equipment in paper or board mills. On the roll-winder depends whether due credit is done to all of the care and skill in bringing the web up to the reels.

The capacity for slitting and winding good rolls must be built into the machine if it is to give efficient and dependable service.

FIG. 13
Camachine-10 Model 10 for Finishing Room Service.

To obtain good results from an indifferently good machine requires that the operator shall make up, out of his own resourcefulness in each individual case, what the designer of the machine lacked in specialized training and ability. A haphazard combination of a slitting method and a roll-winding method can hardly be expected to produce an efficient slitting and roll-winding machine.

Cameron Machine Company's sole and only business is to cooperate with mills and factories requiring the service of efficient slitting and roll-winding machines, either for service as winders in connection with papermaking machines, or as rewinders in mill finishing rooms, or in factories manufacturing paper products. All of the company's energies are devoted to keping abreast of the requirements for paper and board in rolls of every conceivable kind of paper.

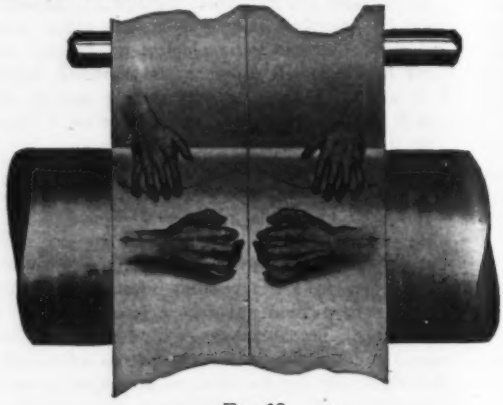


FIG. 12
Diagram showing the action and effect of the patented system of drum-surface grooving used on Camachine Mill Type Roll-Winders.

The experience gained in this long period of specialization is at the service of those interested in cutting costs and improving their methods of producing rolls.

Complete Financing of Smallwood Stone Co.

[FROM OUR REGULAR CORRESPONDENT]

CLEVELAND, July 12, 1926.—Maynard H. Murch & Co., Cleveland bankers, have completed the financing of the Smallwood Stone Company with the offering of $500,000 first closed mortgage bonds. The Smallwood company was established in 1900 and manufacture pulp stones for the manufacture of paper pulp. Recently 25,000 shares of its class A stock were offered.

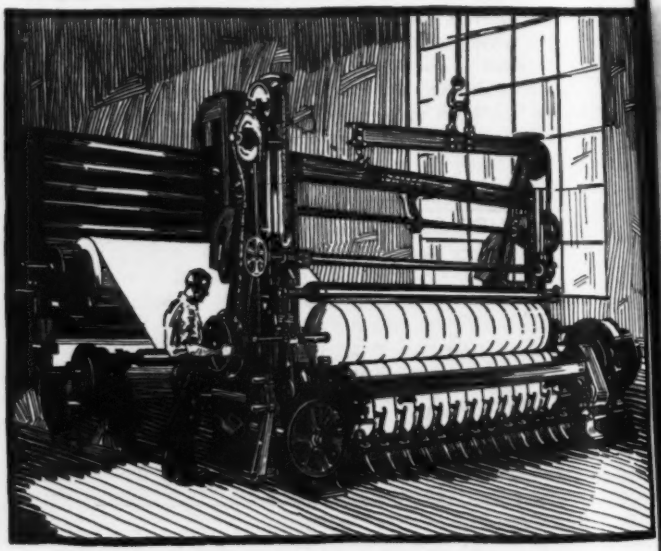


FIG. 14
Camachine-18 for Paper and Board Mill Service.

The new bonds are dated July 1, 1926, and mature serially, $50,000 on July 1 of each year from 1927 to 1936 inclusive. They are priced to yield from about 6 per cent to 6½ per cent according to maturity.

In the five years ended with 1925 earnings averaged 3.75 maximum interest requirements, in the last three they were 5.41 times and in 1925, 8.47 times.

Section of the

COST ASSOCIATION OF THE PAPER INDUSTRY

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THE AMERICAN PAPER AND PULP ASSOCIATION

Conducted by THOS. J. BURKE, C.A., Sec-Treas

Judging Organization and Personnel in the Financial and Industrial Investigation

By Arthur Anderson of Arthur Anderson & Co.

The normal expectation of most businesses is growth. This growth is attained through greater sales, greater operations and utilization of greater capital. It is almost invariably accompanied by increased personnel, by a greater specialization of functionalization of each man's work and by increasing difficulties in the supervision of personnel and the direction of work.

Very often the most critical time in the history of a business is when it reaches the point of being too large for one-man control and too small for effective functional organization control. At that time too little is known about the principles of organization, there is rarely a clean cut definition of authorities or assignments of responsibilities, and the personnel has not been trained to handle the broader scope of work thrust upon it. For a long time thereafter the effect of the one-man regime will be felt and in many businesses of the present day there exist organization and personnel problems arising from the retention of old and privileged employees, from the handling of certain detailed and minor functions by the executives, from a tendency to disregard organization lines and from over-lapping functions.

The perfect organization is unattainable because theory must always be modified by particular and usually personal conditions, and also because the business itself is always growing or changing, necessitating a flexibility and adaptability in organization plan. Yet the matter of organization and personnel is so vital and so influences the effectiveness of management that it becomes one of the first and most important points of study in either the internal or external investigation.

Broad Tests of Correct Organization

The best organization form is that which first recognizes a few basic principles and then is intimately adapted to the particular conditions of the given business. This adaptation may often at first glance make the organization plan appear faulty. Certain fundamentals are essential, however, and should be found in every sound plan of organization. Responsibilities and authorities must be clearly defined and must be equal. The organization plan should be functional rather than personal in character. It should be generally understood and definitely observed.

Since organization is the principal instrument of management, the correctness of organization and personnel may often be partially judged by the effectiveness of management. That is, the history of sales, history of earnings, and analysis of net worth to a great extent, reflect the qualities of organization and personnel. If the accomplishment has been good, and there have been no abnormally favoring circumstances such as patent monopoly or distribution monopoly, it is fair to assume that the organization has been good.

This is the broadest kind of a test and is not entirely dependable. The only other broad test is that of *esprit d' corps*. This is an intangible thing but nevertheless very evident. If the workers as a whole appear satisfied and interested in their work, if labor troubles are rare, if there is an air of "being on the job," these are indicative of favorable executive organization and personnel.

Naturally, the form or organization and to some extent the choice of personnel is a reflection of the abilities, attitudes, characteristics, and methods of the chief executive. A business has been described as the lengthened shadow of one man, and by studying the chief executive, or rather, the one person who is really vitalizing the business, a very fair conception may usually be gained of what to expect from the detailed analysis of the whole organization. Sometimes the characteristics of the organization are those of some dominent personality who has passed out of the picture, but whose policies still profoundly influence the business.

Detailed Tests of Organization

The investigative analysis of organization is made along standardized lines and necessitates the use of organization charts. The first step is to secure from the principal executives their conception of the plan, gradually combining and co-ordinating these ideas, modifying them by observation until a true plan of the executive level may be charted. The same process is gone through in each of the main sections of the business—sales, accounting and manufacturing—and then in each of the sub-departments, resulting finally in the production of a reliable chart of the complete organization plan as it actually exists and operates.

The preparation of such a chart is more difficult than would be expected, for it is only rarely that the organization has previously been charted or defined, and usually any existent charts are incorrect. Moreover, organization plans are usually so vague that a different conception exists in the mind of every person. Sometimes there has been a conscious effort to *avoid* defining the organization plan, on the theory that a definition of authorities would lead to discord and jealousy. Sometimes this theory is followed to such an extent that no definite titles of position are used on the basis that it does no good to call a man "General Manager,"—that he should prove his authority by demonstrated ability. This is an extreme attitude, but one that has been found to exist.

COST SECTION

* Management and Administration in Manufacturing Industries.

Having prepared a complete chart of the organization as it exists at present, the next step is to subject this chart to an intensive analysis for the purpose of determining its principal points of strength and weakness. It must be studied to determine whether there is a fairly clear definition of functions or whether certain men are each charged with several working functions. It will also show whether the functionalization and centralization of authority and responsibility are laid out on a sound basis, whether certain executives carry too heavy a load, whether there is provision for carrying on the work in the event the "key" executives drop out, and whether there is tangible provision for the co-ordination of the various functions of the business as a whole.

Each of the foregoing considerations is vital to the proper organization of the business and merits thorough investigation. It will be found in many instances that certain survivals of the one-man business idea have seriously crippled the application of the theoretical organization plan. Certain men will be found actually responsible for a number of unrelated functions who have carried over these responsibilities from the old days when the business was so small that they could effectively perform these various functions. Other men will be found who are charged with certain definite duties under the company's theoretical plan of organization, but who actually do not possess the requisite authority nor shoulder the real responsibility. These men really perform the functions of clerks or assistants to the older men who have retained the real authority while surrendering certain of the titles.

Organization Balance

Another angle of the investigation concerns itself with determining whether the organization is properly balanced. If certain executives are continuously swamped with work while others are normally carrying a light load it is a sign of weakness in the organization plan or in the executive personnel. Assuming that the fault is found to be entirely with the distribution and allocation of executive responsibilities, it is evident that steps should be taken, which, without destroying a true functionalization of the administrative and executive work of the organization, will serve to equalize the load.

The investigator will frequently find that although the principal executive positions are being effectively filled by the present incumbents, no real attempt is being made to train understudies who can take hold and carry on when the older men let go. Death is no respecter of persons and old age is inevitable. Unless provision for these eventualities is made in advance, an organization may be dealt a staggering blow at the very time the fortunes of the business are at a critical stage and the very best the entire organization can give is hardly good enough.

The analysis of a company's chart of organization may disclose the fact that, although each department of the business is run efficiently there is no effective co-ordination of the various functions into one harmonious, unified organization. Misunderstandings and petty jealousies among the several department heads may be nullifying the otherwise excellent work of the executives to a serious degree. If a chronic situation of this kind is found to exist, the responsibility therefore must be laid at the door of the general manager of the company. It is his duty to see that every department head is imbued with a breadth of vision which enables him to look beyond the walls of his own department and to work wholeheartedly in the interests of the organization as a whole. In addition to this co-operation of purpose there must be an effective correlation of endeavor as well. Production should be kept within the limitations of probable demand; and sales campaigns, on the other hand should take into consideration the maximum production possible with the present plant facilities and factory organization.

Relations of Organization and Personnel

Although it is essential that there be a definite organization plan and that this plan should follow certain basic principles, it is nevertheless true that organization is only the means of making the best use of personnel and that incompetent personnel will result in faulty management in spite of a very high development of organization. Nevertheless faults in organization often produce faults in management which are improperly ascribed to faults in personnel. In the broad sense, an organization is faulty unless it gives every man a chance to grow and holds out to him a logical reward of bettered position as he develops.

If the executives hold their position because of a family influence rather than because of ability the ambitions of a sub-executive personnel will be stifled and really promising men will not remain long in an organization with that inherent handicap.

Similarly, if the higher executives do not deliberately try to develop the men under them by increasing delegations of responsibility and authority, these sub-heads will not develop fully of their own initiative.

If the management fails to analyze properly the requirements of various positions, or fails to analyze the characteristics of the various employees, it is almost inevitable that some men will be misplaced, that is, required to do a type of work for which they do not have the training, experience, mentality, personality or inclination. Thus a man who might be excellent as a statistician would probably be a failure as a salesman. Possibly a competent salesman would be absolutely misplaced as sales manager. A good accounts-receivable clerk might fail as credit manager, or a shop superintendent fail as purchasing agent. It is not unusual to find men misplaced in the high executive levels, for men have been made general managers because of excellent showings as sales manager or comptroller; and men have been retained as works managers who should have been advanced to general manager. Not infrequently the influence of inherited stock interest has resulted in the filling of high executive places by incompetents.

The investigation of the executive personnel, therefore, is an essential corollary to the analysis of the organization. This investigation entails a study of the qualifications of each of the executives for the position he holds, with special consideration to the results he has accomplished.

Functions of Committees

In making the investigation of organization it will usually be found that there are various committees or conferences, which are supposed to be made up of certain executives or department heads, and which are supposed to meet at fairly definite times for advisory or analytical purposes. In many cases, however, these committees have lapsed from their original intention. They either may not meet as arranged; or certain of the personnel are habitually absent; or their meetings may prove futile of constructive accomplishment. Cases have been noted where executive committees theortically existed but actually had held no official meetings for years and kept no records whatever of such informal get-togethers as occurred.

For the purposes of the investigation it is essential that all existing committees and conferences be carefully identified and that any "theoretical" committees be studied as to their actuality and effectiveness. Furthermore, the organization plan must be studied to determine whether there is a lack of co-ordination which might be remedied by the creation of certain committees. If committees are recommended in the proposed organization plan, they must be fully specified as to personnel, time and frequency of meeting, purpose, functions of authority and responsibility, and relationship to principal executives.

If committees are worth having, it is worth while for them to keep full and accurate records, of their meetings, in order that full value may be had from the subjects discussed and the suggestions and conclusions arrived at. It will be necessary that they have the power of appointing special sub-committees on problems requiring further investigation, study or assembly of data.

It sometimes happens that committees which were properly conceived and started have so changed their functions as to be actually a danger and detriment to the business. One example of this that comes to mind is that of an executive committee which gradually gained the ascendency over the chief executive, until it actually absorbed the executive function, yet because of discord between individuals was always failing to come to absolute decisions, each individual assuming the right to issue orders or make decisions on

any matter. Such a situation is sometimes the result of a normally conceived advisory committee system, but in other cases it results from actually setting up a committee form of organization.

The committee form of organization is usually found to be dangerous, since most such committees waver between the extremes of gross assumption of authority by some members and a disclaiming of authority by all members. This results in preventing both workers and outsiders from securing either quick decisions or effective action on questions of policy. Fortunately this committee system of control is becoming rare, but where it is encountered in the course of an investigation it must be subjected to the most careful scrutiny for its manner of operation and its effect on the business as a whole.

If the business is of any size it will be found that almost inevitably committees are the chief vehicle for producing teamwork and co-ordination of viewpoint in the organization. The larger the business, the greater is the need for such definite co-ordination, because the number and the physical separation of executives prevents the opportunities for personal contact and understanding which occur in the smaller establishments.

Properly directed committees are indispensable to the conduct of modern business. They serve as advisory bodies to the higher executives, tend to create broader individual viewpoints, and promote harmony, unity, tolerance, and understanding among the entire personnel.

Personal Statistics

Preliminary to the study of personnel qualifications there must be secured a list of the executive and administrative personnel, giving position, name, age, salary, years of experience in the business, and sometimes the stockholdings. This list is analyzed from the viewpoints of: age, how long the executives may expect to remain active in the business and whether the sub-executives are younger; salary, whether compensation is adequate for the position or excessive and whether cheap men are used in responsible positions; stockholdings or bonuses, to indicate whether remuneration is based on effort and whether a financial incentive exists. Various minor analyses and conclusions may be made from such a list, and sometimes it is desirable to carry a similar analysis down to and including the workers, showing classifications of skilled and unskilled, age and service by groups, rates of hourly pay, men on day or piece work, number on pension list, and other equally significant groupings.

Personal Qualifications

Having secured the foregoing statistical data on the executive and administrative personnel, the next step is to size up the fitness of the individual for the executive position he occupies. The qualifications to be considered in such an analysis may be said to be comprised of the following:

Character	Experience
Mental capacity	Personality
Judgment	Education

The relative importance of these qualifications, of course, will vary with the position that the man occupies although it may be said that honesty and integrity of purpose are fundamental prerequisites for every responsible executive position. Mental capacity is a qualification that is of immense importance where original thinking and constructive work are required, but which may be almost a handicap to the performance of monotonous and routine tasks for any extended period. Mental capacity often varies largely by inclination or tendency, in fact this may almost be said to be the rule of life. Certain men may have great abilities along the lines of mathematics who are duds when it comes to things mechanical. A great lawyer may possess an inherent inability to understand the elements of double entry bookkeeping. Similarly, a man may be so constituted that he can readily grasp sales principles, sales psychology and sales arguments and yet be hopelessly bewildered by problems of production planning or materials control. Experience and education represent acquired qualifications to a large extent although the benefit derived by a man from his training will be affected largely by his mental capacity. Judgment and personality, on the other hand, resemble mental capacity in being qualifications that are primarily inherent in the individual, although these qualifications also may undoubtedly be developed by intelligently directed effort.

Qualifications of Education

In every position the matter of education must be given some weight. Thus a laborer in the yard gang needs so little that he may not be able to read or write, he need not even speak the language of the country. His educational requirements are practically zero. But unless he can read, write, speak the language and possibly have some knowledge of figures, he cannot normally hope to be made foreman. Generally, as the importance of the work increases, the educational requirement increases. This is true even aside from that class of work which is technical in character and is based on educational training or preparation. In the higher executive levels an education of a cultural type is a great advantage if not actually a necessity, since the position may carry with it distinct social obligations.

In analyzing the educational attainment of a person the mistake must not be made of gaging it by the extent of school, college or university contact. Many men are so absorptive that they acquire new elements each day from books, papers, or personal contact. Many others are so earnest in self-improvement that they are consciously and conscientiously increasing their education by means of night school, correspondence courses, or self-imposed routines of study. Nor must it be assumed that the more education a person has, the better he is fitted for his given job—rather, the job must be studied as to its educational requirements, then if the person measures up to these, that is all that is required.

Qualifications of Experience

Experience and education are in some ways closely related, for specialized education may be acquired by experience in the particular type of work. It is hard therefore to draw the line between the requirements of education and experience in many positions. This is particularly true where education has been of the job-preparatory or trade school type. For example, men may come from automobile trade schools and work satisfactorily side by side with mechanics of 20 years' experience. So the job must be carefully studied as to the extent to which greater or specialized education may be substituted for specialized experience, or *vice versa*.

In positions requiring supervisory capacity, experience is vital. There is, to be sure, a question of aptitude, for some men have such attributes of personality that no amount of experience can make them capable of departmental supervision, and this fundamental handicap usually is so potent that it blocks the acquirement of experience.

Some experience is indirect, since every man handles some types of work for the first time. Yet his ability in the job may be increased by experience of a related or supplementary type. Thus experience as a stock clerk is an aid to handling a clerical job in the purchasing or production departments. Experience as sales manager is of value in taking on the duties of general manager. Even experience as a top sergeant in the army may be an asset in many factory supervisory positions.

It is practically axiomatic that a man's abilities in any position are increased by the extent of his experience in that or in closely similar positions. The extent of increase is, however, problematical. Thus of two men with equal years of experience, one may have so much greater mental capacity, or so much more energy, or ambition, that he has derived several times the benefit from that experience that the other has.

There is a theory that the difference between the average man and the notably successful man is only two per cent—of either ability, desire or energy. This is debatable. But it is the slightly greater "drive" of some men which causes them to derive more benefit from all experiences, acquire more education, make greater

use of their inherent abilities and become more outstanding in personality. It is intangible, but makes itself known in tangible results and therefore is always taken into consideration.

Personal Analysis

The problem of the investigator, therefore, becomes one of studying each one of the important members of the organization, and of reaching a sound conclusion as to whether he is fit or unfit in the particular position occupied. Although the six qualifications mentioned above are important for every executive position, he will be governed in reaching his conclusions by the special requirements of the position under consideration. Thus the duties of general manager make such varied and exacting calls upon a man that the successful general manager must, as a rule, possess the first five qualifications, and preferably the sixth also, in a marked degree in order to measure up to the demands of his position. The prime essentials for the successful sales manager may be said to be personality or wide acquaintance with the trade, which is just a form of experience, and that combination of mental capacity and judgment which enables him to plan his campaigns with resourcefulness and daring while seasoning them with the essential modicum of common sense. The accountant must be a model of conscientiousness and business integrity while possessing sufficient technical knowledge of his work to enable him to make a true record of the company's financial transactions.

The foregoing cases are used only as illustrative of the varying standards the investigator will use in striving to determine the fitness of the individual for the position he occupies. In the course of his investigation he may find several executives who appear to fall far short of his minimum requirements. If engaged in a financial investigation for a security issue he may probably stop at this point, but if engaged on an internal investigation for the management, he will attempt to find the underlying reasons for the short-comings in order that he may be in a position to make constructive recommendations.

Certain of these men who fail to make the grade will be found to be individuals who owed their positions in the first place to family connections or other influence rather than to any demonstrated capacity for the work. Other men will have succeeded to their positions, under the rule of seniority, through years of loyal and painstaking effort. Unfortunately, not every faithful employee, who has grown old in the company's employ is fitted for an important position and the promotion which was intended as a reward for years of loyal service may have spoiled a perfectly good shop foreman in the making of an incompetent shop superintendent. Still other men will be found to possess real capacity and valuable preliminary training whose failure to meet the requirements of their positions is due to the fact that, fundamentally, they are better adapted for other work.

Having reached his conclusions in each case as to the underlying causes for the failures and shortcomings among the personnel, the investigator will bring his recommendations as tactfully as possible to the attention of the men who have ordered the investigation. In making these recommendations the greatest care must be exercised to avoid all pretensions to omniscience or infallibility, for it goes without saying, that it is impossible for any man to step in and, in the course of a relatively limited investigation, diagnose accurately and effectively prescribe for all of the organization problems of a large corporation. On the other hand, there is no discounting the value of an outside viewpoint especially when it represents the viewpoint of an investigator trained in the study and solution of problems of just this type.

Vital Importance of Personnel

With the industrial activities of our present day ever broadening and ever assuming larger and more complex structures it is inevitable that problems of organization and personnel will more and more become of vital importance in determining the fortunes and indeed the continuing existence of any business enterprise. The days of profit margins sufficiently wide to absorb the mistakes of faulty management are rapidly drawing to a close. In fact, we already see many of the key industries of this country in the hands of a relatively small number of large and highly developed units which achieved their strong position in their respective fields only through having developed a highly organized and supremely effective type of management.

To the solution of these broader questions involving corporate success or failure the investigator of organization and personnel problems should be prepared to make a real contribution.

Thus we see how in modern business, correct organization and capable personnel go hand in hand as essential factors to success. The investigator who delves into these problems, who attempts to place his finger upon the weak spots in the plan of organization or among the executive personnel and who undertakes to make recommendations looking to their cure, is charged with a most serious responsibility to sift and weigh the evidence until he is certain of his conclusions. Let him but sense the extent of this obligation and the weight of his responsibility, and then his opportunities for constructive services will be commensurate with the responsibilities he assumes.

Rates on Paper From New England Adjusted

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., July 14, 1926.—A decision has been rendered by the Interstate Commerce Commission in docket 16,849 of the New England Paper and Pulp Traffic Association against the Maine Central Railroad Company. In their syllabus in this connection the Commissioners say:

"Rates on printing paper and wrapping paper, in carloads, from points in New England to Baltimore, Md., found not unreasonable or otherwise unlawful.

"Rates from the same points to Washington, D. C., found unreasonable to the extent that they exceed the corresponding ratios to Baltimore by more than 2 cents per 100 pounds. [illegible] awarded."

The Commission has suspended until November 9 the operation of certain railroad schedules which propose to increase the rates on news print and poster paper in carloads between North Pacific coast points on the one hand, and Spokane, Washington, and related points on the other.

Sanitary Paper Products to Start

OAKLAND, Cal., June 30, 1926.—Selecting Oakland for their headquarters, the Sanitary Paper Products Company, a new manufacturing company of sanitary products, will open a temporary factory at 854 Stanford avenue for the manufacture of paper caps, it is announced. The company states:

"The users of sanitary paper caps will be the millinery trade. The caps will be used by customers when having hats fitted.

"Two machines, specially designed by Mrs. Henry D. Tuggy, secretary and treasurer of the company, are now under construction on the Pacific coast. When completed these machines will be installed in a permanent factory, the location of which is yet to be decided on. Roy F. Bopp is president and general manager of the company.

"Several other products of a sanitary nature and otherwise will be put on the market by the Sanitary Paper Products Company as soon as patents are granted."

Merges With Container Corp.

[FROM OUR REGULAR CORRESPONDENT]

CLEVELAND, July 6, 1926.—The Mid-West Box Company, 304 West 106th street, one of Cleveland's largest paper box factories has been merged with the newly incorporated Container Corporation of America. The Mid-West Company retains its corporate existence and will be operated by J. P. Brunt, president and E. R. Hankins, vice president both of whom are vice presidents in the newly organized corporation.

The new company now controls mills at Chicago, Kokomo, Ind., Circleville, O., and Philadelphia as well as a number of other plants.

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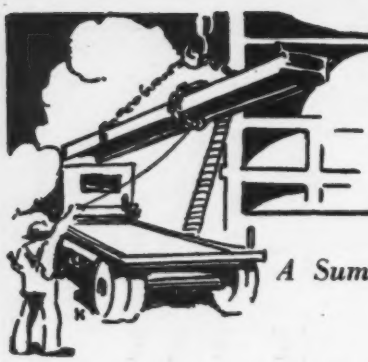


CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

Monroe, La.—The Brown Paper Mill Company, Inc., is disposing of a bond issue of $2,500,000, a considerable portion of the fund to be used for the construction of its proposed new addition, for which plans are now in progress. The new mill unit will be used for the production of kraft paper. The installation will include a paper-making machine, finishing and accessory equipment, together with a complete pulp battery, comprising thickening and screening equipment, continuous pulp- washing apparatus, revolving digesters, vacuum evaporators, etc. Considerable electrical equipment will also be installed, including generating machinery, switchboard apparatus and auxiliaries. It is expected to ask bids for different features of the work at an early date. The entire project is reported to cost in excess of $1,000,000. H. L. Brown is president, and George S. Holmes, vice-president and general manager. George F. Hardy, 305 Broadway, New York, is consulting engineer; bids will be asked through the last noted office. The new installation will advance the output from a present rating of 60 tons per day, to about 125 tons daily.

Los Angeles, Cal.—Officials of the Schumacher Wall Board Company, 5802 San Pedro street, have formed a new company under Delaware laws to be known as the Schumacher Wall Board Corporation, capitalized at $9,000,000, to take over and expand the present organization. It is proposed to develop considerable increase in present output.

St. Louis, Mo.—The Evertz & Etz Paper Company, 1542 South 7th street, has awarded a general contract to Frantz & Frantz, 4282 Arsenal street, for the erection of its proposed one-story storage and distributing plant, 60 x 140 feet, at location noted, replacing a recent fire loss. Work will begin at an early date. The new structure will cost close to $30,000. The Koenner Engineering Company, Syndicate Trust Building, St. Louis, is engineer.

Winsted, Conn.—Following its recent consolidation with the Star Pin Company, Derby, Conn., the New England Pin Company, Winsted, has decided to continue operations at its local paper box factory and this division will be maintained at Winsted, as heretofore, with full working force. Other departments will be removed to Derby.

Salem, Ore.—The Oregon Pulp and Paper Company is said to be pushing construction on new buildings at its plant, for which a general contract recently was awarded, and expects to have the structure ready for service in the near future. The entire program is estimated to cost in excess of $700,000, and will provide for large advance in output. Knight & Howell, United States Bank Building, Portland, Ore., are architects and engineers for the work.

Milwaukee, Wis.—The Slocum Straw Works, 656-78 National avenue, Milwaukee, manufacturers of straw board and kindred specialties, has completed plans for the construction of a new addition to its plant and will proceed with work at an early date. It will be two-story and basement, 35 x 135 feet, brick and mill type, reported to cost about $30,000. It is purposed to develop increased output. Brust & Phillips, 405 Broadway, Milwaukee, are architects. A. Slocum is president.

Marinette, Wis.—The Northern Paper Mills, Inc., Green Bay, Wis., will proceed with the construction of two power dams in the Chalk Hill and White Rapids districts, Menominee River, to be used for hydroelectric power service. The work is reported to cost in excess of $100,000, and will be carried out by Siems, Helmers & Schaffner, Guardian Life Building, St. Paul, Minn.

Philadelphia, Pa.—The Elam Papeterie Company has leased a floor in the building at Randolph and Jefferson streets, and will occupy as a new local plant for the production of paper specialties.

Hartford, Conn.—The Eagle Paper Company, 127 State street, has acquired a building on Atlantic avenue, generally known as the Hartford Storage Company Building, for a consideration of $100,000, and will take over the property at an early date. Present leases, both at acquired building and on property now occupied by the Eagle company, have a number of months to run. At expiration, the purchasing company will remodel and improve the Atlantic Avenue structure and occupy for a new storage and distributing plant, utilizing all six floors of the structure. Nathan F. Rubin is president.

Brookfield, Mass.—The McLaurin-Jones Company, manufacturers of gummed papers, etc., will proceed with the erection of the proposed addition to its plant, to be two-story, 65 x 85 feet, designed for increased production. It will cost close to $60,000, with equipment. The general contract was recently let to the Central Building Company, 58 Front street, Worcester, Mass.

New York, N. Y.—The Simon Patent Box Corporation has leased space in the building at 11 West 20th street, and will establish a new plant at this location. Operations will begin at an early date.

Muskegon, Mich.—Fire, July 10, damaged a portion of the power station used for a conveyor system at the plant of the Central Paper Company. An official estimate of loss has not been announced. The damage will be replaced.

Holyoke, Mass.—In connection with its general plans for reorganization, the American Writing Paper Company, Holyoke, purposes to confine its operations to 16 of its existing mill units located at Holyoke; Unionville and Windsor Locks, Conn. A fund of more than $1,000,000, will be provided for extensions and betterments at these mills, including machinery replacements and improved mechanical equipment.

Port Arthur, Ont.—The Thunder Bay Pulp and Paper Company is perfecting plans for the early construction of its proposed local mill for the production of news print and will likely carry out the project by day labor. It is reported to cost in excess of $500,000, including machinery, list of which will soon be arranged.

Poplar Island, B. C.—The Canadian Rayon Pulp Company, Ltd., is perfecting plans for the early construction of a new local pulp mill, and will begin work within the next 30 to 60 days. The plant will be equipped for an initial output of 50 tons per day. A power house, saw mill, machine shop and other mechanical structures will be built. The entire project is reported to cost close to $750,000.

Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING JULY 17, 1926

SUMMARY

Cigarette paper .....173 cs.
Wall paper .....11 bls., 2 cs.
Paper hangings .....16 bls., 9 cs.
Pergamyn paper .....30 cs.
News print .....1232 rolls, 157 bls.
Printing paper .....79 rolls, 388 cs.
Wrapping paper .....46 bdls., 10 rolls, 11 cs.
Packing paper .....495 bls.
Tissue paper .....1 cs.
Filter paper .....13 cs.
Drawing paper .....10 cs.
Metal coated paper .....19 cs.
Writing paper .....17 cs.
Tracing paper .....3 cs.
Parchment paper .....8 bls.
Surface coated paper .....66 cs.
Colored paper .....10 cs.
Fancy paper .....4 cs.
Litho paper .....15 cs.
Aluminum paper .....6 cs.
Straw board .....397 rolls
Miscellaneous paper, 853 rolls, 17 pkgs., 5 bls., 285 cs.

CIGARETTE PAPER

Standard Products Corp., Vincent, Havre, 120 cs.
British American Tobacco Co., Cedric, Liverpool, 5 cs.
P. J. Schweitzer, Pr. Adams, Marseilles, 48 cs.

WALL PAPER

Globe Shipping Co., Hamburg, Hamburg, 3 bls.
F. J. Emmerich, Scythia, Liverpool, 1 cs.
A. C. Dodman, Jr., Inc., Mauretania, Southampton, 8 bls., 1 cs.

PAPER HANGINGS

W. H. S. Lloyd & Co., Minnewaska, London, 16 bls., 9 cs.

PERGAMYN PAPER

F. C. Strype, Hamburg, Hamburg, 30 cs.

NEWS PRINT

Parsons & Whittemore, Inc., Yorck, Bremen, 154 rolls, 157 bls.
Parsons & Whittemore, Inc., Korsholm, Wiborg, 909 rolls.
J. Gilman & Co., Hamburg, Hamburg, 169 rolls.

PRINTING PAPER

Maurice O'Meara Co., Yorck, Bremen, 35 cs.
Perkins, Goodwin & Co., Hamburg, Hamburg, 19 cs.
Keuffel & Esser Co., Hamburg, Hamburg, 79 rol's.
B. F. Drakenfeld & Co., Scythia, Liverpool, 19 cs.
P. Puttman, Pennland, Antwerp, 45 cs.
Maurice O'Meara Co., Natirar, Kotka, 270 cs.

WRAPPING PAPER

Blauvelt-Wiley Paper Manfg. Co., Cameronia, Glasgow, 46 bdls.
Hensel, Bruckman & Lorbacher, Hamburg, Hamburg, 5 cs.
F. C. Strype, Pennland, Antwerp, 10 rolls, 6 cs.

PACKING PAPER

J. P. Heffernan Paper Co., Ala, Rotterdam, 416 bls.
National City Bank, Ala, Rotterdam, 79 bls.

TISSUE PAPER

F. C. Strype, Scythia, Liverpool, 1 cs.

FILTER PAPER

Dunham & Reeve, Tuscania, London, 1 cs.
A. Giese & Son, Hamburg, Hamburg, 2 cs.
H. Reeve Angel & Co., Inc., Minnewaska, London, 10 cs.

DRAWING PAPER

F. E. Wallace & Co., Hamburg, Hamburg, 2 cs.
Keuffel & Esser, Hamburg, Hamburg, 4 cs.
International Forwarding Co., Minnewaska, London, 2 cs.
H. Reeve Angel & Co., Inc., Minnewaska, London, 2 cs.

METAL COATED PAPER

Perry, Ryer & Co., Yorck, Bremen, 10 cs.
Hensel, Bruckman & Lorbacher, Hamburg, Hamburg, 9 cs.

WRITING PAPER

Arnold, Constable & Co., Hamburg, Hamburg, 1 cs.
Guibout freres, Paris, Havre, 4 cs.
Japan Paper Co., Paris, Havre, 12 cs.

TRACING PAPER

Keuffel & Esser, Hamburg, Hamburg, 3 cs.

PARCHMENT PAPER

Maurice O'Meara Co., Hamburg, Hamburg, 8 bls.

SURFACE COATED PAPER

Whiting & Patterson Co., Inc., Hamburg, Hamburg, 19 cs.
Phoenix Shipping Co., Hamburg, Hamburg, 7 cs.
Gevaert Co. of America, Pennland, Antwerp, 40 cs.

COLORED PAPER

Borden-Riley Paper Co., Pennland, Antwerp, 10 cs.

FANCY PAPER

Whiting & Patterson Co., Inc., Majestic, Southampton, 4 cs.

LITHO-PAPER

Barnhard, Nieress Co., Hague Maru, Canton, 15 cs.

ALUMINUM PAPER

H. D. Catty & Co., Pennland, Antwerp, 6 cs.

STRAW BOARD

Shippenhaus Bros., Veendam, Rotterdam, 200 rolls.
A. Vuyk, Veendam, Rotterdam, 197 rolls.

MISCELLANEOUS PAPER

The Borregaard Co., Inc., Drottningholm, Gothenburg, 838 rolls.
Wilkinson Bros. & Co., Inc., Drottningholm, Gothenburg, 15 rolls.
E. H. Sergeant & Co., Drottningholm, Gothenburg, 3 cs.
Japan Paper Co., Drottningholm, Gothenburg, 2 cs.
Steiner Paper Corp., Veendam, Rotterdam, 134 cs.
Japan Paper Co., Veendam, Rotterdam, 5 bls.
Corn Exchange Bank, Tokiwa Maru, Kobe, 37 cs.
H. Reeve Angel & Co., Inc., Tokiwa Maru, Kobe, 5 cs.
R. Wilson Paper Corp., Cameronia, Glasgow, 30 rolls.
Perry, Ryer & Co., Cameronia, Glasgow, 80 cs.
Hermann Paper Co., Hamburg, Hamburg, 13 cs.
E. B. Mergowitz, Ala, Rotterdam, 1 cs.
P. J. Schweitzer, Paris, Havre, 7 cs.
The Eleto Co., Paris, Havre, 3 cs., 17 pkgs.

RAGS, BAGGINGS, ETC.

Equitable Trust Co., Isarco, Genoa, 35 bls. bagging.
E. J. Keller Co., Inc., Isarco, Algiers, 100 bls. bagging.
A. W. Fenton, Inc., Bankdale, Marseilles, 135 bls. rags.
L. H. Abenheimer, Bankdale, Barcelona, 103 bls. bagging.
National Bank of Commerce, Yorck, Bremen, 53 bls. rags.
L. H. Abenheimer, Yorck, Bremen, 67 bls. bagging.
Central National Bank, Yorck, Bremen, 138 bls. rags.
A. W. Fenton, Inc., Yorck, Bremen, 115 bls. rags.
Equitable Trust Co., Hague Maru, Kobe, 40 bls. rags.
Corn Exchange Bank, Vincent, Havre, 22 bls. rags.
Salomon Bros. & Co., Vincent, Havre, 55 bls. thread waste.
Castle & Overton, Inc., Vincent, Havre, 45 bls. bagging.
Anglo-South American Trust Co., Troubadour, Buenos Aires, 82 bls. rags.
Bulkley, Dunton & Co., Veendam, Rotterdam, 255 bls. rags.
J. Cohen Son & Co., Veendam, Rotterdam, 73 bls. bagging.
The Stone Bros. Co., Inc., Veendam, Rotterdam, 168 bls. rags.
Maurice O'Meara Co., Veendam, Rotterdam, 44 bls. bagging.
A. H. Searle, Inc., Tuscania, London, 248 bls. rags.
Amsinck, Sonne & Co., Inc., Tuscania, London, 34 bls. rags.
E. J. Keller Co., Inc., Hamburg, Hamburg, 103 bls. rag pulp.
S. Silberman & Co., Hamburg, Hamburg, 106 bls. rags.
Chase National Bank, Hamburg, Hamburg, 104 bls. rags.
Salomon Bros. & Co., Hamburg, Hamburg, 172 bls. rags.
Marx Maier Papermill Supply Co., Hamburg, Hamburg, 89 bls. rags.
M. Snedeker Corp., Hamburg, Hamburg, 68 bls. rags.
S. D. Kaplan & Co., Cedric, Liverpool, 31 bls. rags.
Guaranty Trust Co., H. Olav, Copenhagen, 100 bls. bagging.
Bank of New York, H. Olav, Copenhagen, 157 bls. rags.
Equitable Trust Co., H. Olav, Copenhagen, 2400 bls. bagging.
E. J. Keller Co., Inc., Ala, Rotterdam, 170 bls. bagging.
Lone Star Bag Co., Ala, Rotterdam, 60 bls. bagging.
American Woolstock Corp., Ala, Rotterdam, 130 bls. bagging.
The Barrett Co., Sweden Maru, Hamburg, 285 bls. bagging.
P. Berlowitz, Sweden Maru, Hamburg, 80 bls. bagging.
Castle & Overton, Inc., Sweden Maru, Hamburg, 240 bls. bagging.
Chemical National Bank, Patagonier, Antwerp, 156 bls. rags.
Central National Bank, Patagonier, Antwerp, 115 bls. rags.
Kidder, Peabody Accep. Corp., Patagonier, Antwerp, 55 bls. rags.
Chase National Bank, Patagonier, Antwerp, 255 bls. rags.
Chase National Bank, Luxpalile, Leghorn, 178 bls. rags.
Chemical National Bank, Anacortes, Manchester, 13 bls. rags.
The Vacuum Co., Anacortes, Manchester, 60 bls. bagging.
Merchants National Bank, Anacortes, Manchester, 66 bls. bagging.
Royal Manfg. Co., Anacortes, Manchester, 18 bls. bagging.
Chase National Bank, Anacortes, Belfast, 71 bls. rags.

OLD ROPE

Bulkley, Dunton & Co., Veendam, Rotterdam, 142 bls.
Brown Bros. & Co., Veendam, Rotterdam, 82 coils.
Brown Bros. & Co., Hamburg, Hamburg, 79 coils.
American Trading Co., Siboney, Havana, 5 coils.
Brown Bros. & Co., Hellig Olav, Copenhagen, 87 coils.
D. I. Murphy, Eastern Planet, Melbourne, 23 bls.

MANILA ROPE

Ellermans' Wilson Line, Minnewaska, London, 147 coils.

(Continued on page 66)

Imports of Paper and Paper Stock

(Continued from page 65)

CORDAGE

Orchard Paper Co., Veendam, Rotterdam, 85 pkgs.
Hoffman Cordage Manfg. Co., Veendam, Rotterdam, 96 pkgs.

WOOD PULP

Tidewater Papermills Co., Aslaug, Gaspe, P. Q., 8374 bls. wood pulp.
E. M. Sergeant & Co., Drottningholm, Gothenburg, 1322 bls. dry soda pulp.
Johanson, Wales & Sparre, Inc., Drottningholm, Gothenburg, 299 bls. dry soda pulp.
Johanson, Wales & Sparre, Inc., Drottningholm, Gothenburg, 379 bls. sulphite pulp.
H. Hollesen, Inc., Yorck, Bremen, 1315 bls. sulphite pulp, 263 tons.
Castle & Overton, Inc., Yorck, Bremen, 190 bls. wood pulp.
Bulkley, Dunton & Co., Yorck, Bremen, 1350 bls. wood pulp.
E. M. Sergeant & Co., H. Olav, Oslo, 500 bls. wood pulp.
Bulkley, Dunton & Co., Sweden Maru, Hamburg, 250 bls. wood pulp, 51 tons.
Irving Bank-Columbia Trust Co., Sweden Maru, Hamburg, 400 bls. wood pulp, 60 tons.
Acer & Co., Sheafmount, Vancouver, 2850 bls. wood pulp.
M. Gottesman & Co., Inc., Giulia, Sebenico, 2400 bls. wood pulp.
Pagel, Horton & Co., Inc., Natirar, Gefle, 1500 bls. sulphate, 304 tons.
Pagel, Horton & Co., Inc., Natirar, Gefle, 750 bls. sulphite, 152 tons.
E. M. Sergeant & Co., Natirar, Hernosand, 600 bls. sulphite, 100 tons.
Johanson, Wales & Sparre, Inc., Natirar, Hernosand, 840 bls. sulphite, 140 tons.
Johanson, Wales & Sparre, Inc., Natirar, Hernosand, 1500 bls. sulphate, 250 tons.

WOOD PULP BOARDS

Lagerloef Trading Co., Korsholm, Kotka, 575 bls.

WOOD FLOUR

A. Kramer & Co., Veendam, Rotterdam, 400 bags.
The Hansa Co., Ala, Rotterdam, 400 bags.

CASEIN

T. M. Duche & Sons, Troubadour, Buenos Aires, 1668 bags, 100,080 kilos.
Atterbury Bros., Inc., Troubadour, Buenos Aires, 737 bags, 44,220 kilos.
Casein Manfg. Co., Troubadour, Buenos Aires, 666 bags, 39,960 kilos.
Kalbfleisch Corp., Troubadour, Buenos Aires, 1250 bags, 75,000 kilos.
Guaranty Trust Co., Troubadour, Buenos Aires, 167 bags, 10,020 kilos.

NORFOLK IMPORTS

WEEK ENDING JULY 17, 1926

Lagerloef Trading Co., Natirar, Kotka, 2059 rolls wood pulp boards.
Old Dominion Paper Co., Natirar, Kotka, 148 rolls news print.
Johanson, Wales & Sparre, Inc., Natirar, Hernosand, 1800 bls. sulphate, 300 tons.
Johanson, Wales & Sparre, Inc., Natirar, Hernosand, 1080 bls. sulphite, 180 tons.
Castle & Overton, Inc., Western Ally, Rotterdam, 544 bls. wood pulp.

BALTIMORE IMPORTS

WEEK ENDING JULY 17, 1926

Castle & Overton, Inc., Western Ally, Rotterdam, 1816 bls. wood pulp.
E. J. Keller Co., Inc., Breedyk, Karlsruhe, 1206 bls. wood pulp.

BOSTON IMPORTS

WEEK ENDING JULY 17, 1926

Guaranty Trust Co., Troubadour, Buenos Aires, 417 bags casein, 25,020 kilos.
1st National Bank of Boston, Troubadour, B. Aires, 834 bags casein, 50,040 kilos.
Castle & Overton, Inc., Western Ally, Rotterdam, 200 bls. wood pulp.
E. J. Keller Co., Inc., Sacandaga, Rotterdam, 147 bls. bagging.
E. J. Keller Co., Inc., Buyo Maru, Hamburg, 49 bls. rags.
E. J. Keller Co., Inc., Centaurus, Kobe, 25 bls. rags.

SAN FRANCISCO IMPORTS

WEEK ENDING JULY 17, 1926

Frazar & Co., Hague Maru, Osaka, 250 bls. rags.
Frazar & Co., Hague Maru, Yokohama, 60 bls. rags.

PHILADELPHIA IMPORTS

WEEK ENDING JULY 17, 1926

E. J. Keller Co., Inc., Seattle Spirit, Hamburg, 68 bls. rags.
E. J. Keller Co., Inc., Blydendyk, Rotterdam, 34 bls. rags.
Castle & Overton, Inc., Tomalva, Rotterdam, 51 bls. rags.
Castle & Overton, Inc., C. of Eureka, Italy, 218 bls. rags.
Castle & Overton, Inc., Sweden Maru, Hamburg, 212 bls. rags.
Castle & Overton, Inc., Western Ally, Rotterdam, 730 bls. wood pulp.
Castle & Overton, Inc., Marigot, France, 160 bls. rags.
Castle & Overton, Inc., Marigot, France, 206 bls. bagging.
D. I. Murphy, Isarco, Naples, 132 bls. rags.
Phila. Girard National Bank, Isarco, Algiers, 440 bls. rags.
Chase National Bank, Isarco, Algiers, 150 bls. rags.
Chase National Bank, Isarco, Algiers, 117 bls old rope.
D. I. Murphy, Vincent, Havre, 49 bls. rags.
S. E. Ingber, Vincent, Havre, 123 bls. rags.
J. M. Hagy Waste Works, Vincent, Havre, 102 bls. rags.
O. G. Hempstead & Co., Vincent, Havre, 3 cs. printed paper.
Brown Bros. & Co., London Exchange, London, 86 bls. rags.
Equitable Trust Co., London Exchange, London, 174 bls. rags.
J. B. Mora & Co., London Exchange, London, 431 bls. rags.
The Stone Bros. Co., Inc., Ala, Rotterdam, 389 bls. rags.
A. Hurst & Co., Ala, Rotterdam, 10 bls. rags.
Union National Bank, Ala, Rotterdam, 35 bls. bagging.
Phila. Girard National Bank, Ala, Rotterdam, 18 bls. rags.
Castle & Overton, Inc., Ala, Rotterdam, 730 bls. wood pulp, 117 tons.
Castle & Overton, Inc., Ala, Rotterdam, 44 bls. rags.
Darmstadt, Scott & Courtney, Ala, Rotterdam, 63 bls. cotton waste.
R. Wolf, Ala, Rotterdam, 37 bls. rags.
Robert Blank, Ala, Rotterdam, 277 bls. rags.
S. E. Ingber, Ala, Rotterdam, 405 bls. rags.
Patrick Sons, Inc., Ala, Rotterdam, 42 bls. rags.
S. Spector & Co., Ala, Rotterdam, 49 bls. rags.
G. W. Millar & Co., Inc., Ala, Rotterdam, 171 bls. rags.
Castle & Overton, Inc., Sweden Maru, Hamburg, 244 bls. rags.
S. Birkenstein & Sons, Sweden Maru, Hamburg, 176 bls. rags.
S. Silberman & Co., Sweden Maru, Hamburg, 228 bls. rags.
S. E. Ingber, Sweden Maru, Hamburg, 110 bls. rags.
E. J. Keller Co., Inc., Sweden Maru, Hamburg, 110 bls. rags.
A. W. Fenton, Inc., Sweden Maru, Hamburg, 215 bls. rags.
Bulkley, Dunton & Co., Sweden Maru, Hamburg, 25 bls. wood pulp, 5 tons.
M. Gottesman & Co., Inc., Giulia, Sebencio, 1600 bls. wood pulp.
Phila. Girard National Bank, Giulia, Venice, 37 bls. rags.
F. Weber & Co., Giulia, Trieste, 17 cs. printing paper.
Phila. Girard National Bank, Luxpalile, Palermo, 271 bls. rags.
Brown Bros. & Co., Luxpalile, Naples, 29 bls. rags.

Inland Paper Box Co. in New Quarters

DENVER, Colo., July 19, 1926.—After nearly twenty years at their old location, 1624 Blake street, Mr. W. E. Warneke, president and general manager of the Inland Paper Box Company, has purchased and occupied the E. A. Peters building located at 1625-31 Wazee street.

The building has five floors above the basement and is built after regulation type, mill construction, has two electric elevators, a modern gas heating plant, and is protected throughout from fire by the International Automatic Sprinkler system.

The Inland Paper Box Company have already moved their machinery into the building and are operating full capacity.

Many of the machines used are patented and controlled by Mr. Warneke.

On the fourth floor is the printing department where all kinds of fancy printing in one, two and three color work is done, as well as embossed work of the highest class.

The company employ upward of one hundred and fifty people, most of whom have been with the company many years and are experts in their respective lines.

Norwegian Pulp Market Quiet

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., July 21, 1926.—The Norwegian pulp and paper markets are still extremely quiet, with buyers showing some reserve in regard to 1927 requirements. The market for mechanical groundwood is rather weak and industrial port situation is greatly influenced by the British coal strike and industrial deadlock caused by the scarcity of fuel, according to a report from the Consulate General at Oslo. Eighty per cent of the Norwegian and Swedish production of bleached sulphite for 1926 were reported sold by May 1, and sales of unbleached sulphite and sulphate are said to surpass this amount. Exports of chemical pulp during the first quarter of the current year reached a total of 66,962 metric tons, an increase of 7 per cent for the corresponding quarter in 1925 and nearly double the shipments during this period in 1924.

A Remarkable Range of Grades, Textures and Weights

Orr Endless Felts can now be obtained up to 86 feet in length.

With our enlarged new equipment we can now furnish Paper Manufacturers with endless felts up to 86 feet in length.

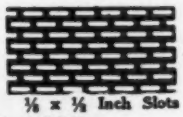
Paper Manufacturers who carefully check manufacturing costs, and also strive to produce more and better paper at a lower cost per ton prefer the unvarying quality and long service of ORR felts. A trial of them will bring about a preference of them that will be lasting.

THE ORR FELT & BLANKET COMPANY, Piqua, Ohio

Perforated Metal Screens

For Pulp and Paper Mills

.165 Inch Round



⅛ x ⅛ Inch Slots

STEEL, COPPER, BRASS, BRONZE, and other Alloys punched for Centrifugal and Rotary Screens, Pulp Washers, Drainer Bottoms, Filter Plates, etc.

CHARLES MUNDT & SONS

63-65 FAIRMONT AVE. JERSEY CITY, N. J.

Missisquoi Pulp and Paper Company

SHELDON SPRINGS VERMONT

White and Tinted Bristols—White Blanks—Index Bristol and Specialties in Card Boards.

TABER PUMPS

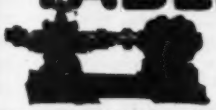


Fig. 510 illustrates Taber SL Double Suction Centrifugal Pump.

TABER PUMP COMPANY
BUFFALO, N. Y.

Ruths Accumulator Company, Inc.

292 Madison Av., New York City

PUMPS

For Every
Pulp and Paper Mill Purpose
Let Us Help Solve Your Problems
LAWRENCE MACHINE CO., Lawrence, Mass.

THE BRISTOL COMPANY
Waterbury, Conn.
Recording Instruments
for Pressure, Liquid Level, Temperature, Humidity, Time, Motion, Speed, Electrical Units, etc.

GENERAL Aluminum Sulphate CHEMICAL

GENERAL CHEMICAL COMPANY 40 RECTOR STREET, NEW YORK

Let us quote on your PULPWOOD Requirements
Finest quality Spruce, Balsam or mixed. Peeled, or with Bark. Any quantity. Prompt shipment or contract for 1926 delivery.
The Erickson Tie & Lumber Co.
SUDBURY, ONT., CANADA
U. S. Representatives
E. J. BERGER & COMPANY
1402 BROADWAY NEW YORK CITY

COMBUSTION ENGINEERING CORPORATION

PULVERIZED FUEL

45 BROAD STREET, NEW YORK

New York Market Review

Office of THE PAPER TRADE JOURNAL,
Wednesday, July 21, 1926.

Although business in the local paper market is dull and quiet, mainly due to the summer vacation period, a cheerful sentiment prevails throughout the industry, and most observers of the situation confidently predict a general expansion of trading in the near future. While the prevailing demand for the various grades of paper is light, prices are holding up very well, and inquiries for future business are coming along in fair volume.

The position of the news print market is sound and the leading publications continue to absorb the increased output in a satisfactory manner. Circulation and advertising statistics plainly show the great strength of this industry. According to figures compiled by the "New York Evening Post" there were 120,226,000 agate lines of advertising in the newspapers of 23 principal cities of the United States during May, 1926, compared with 112,157,000 lines during May, 1925, an increase of 7 per cent, and 108,625,000 lines in May, 1924, an increase of 11 per cent. There was an increase of 7 per cent during the first five months of 1926 over 1925, and 8 per cent over 1924.

New York City newspapers carried about 10 per cent more advertising in the first six months of 1926 than in the first six months of 1925 and 11 per cent more than in the same period of 1924. There was 10 per cent more pages of advertising and reading matter in these papers in the first six months of 1926 than in the corresponding months of 1925. Advertising in national monthly and weekly periodicals for the first six months of 1926 amounted to 13,904,000 agate lines, compared with 12,801,000 lines in the first six months of 1925, a gain of 9 per cent, and 15,590,000 lines in the first six months of 1920, a loss of 11 per cent.

Demand for the various grades of paper board is fairly satisfactory and recent advances are being well maintained. A moderate amount of business was transacted in the fine paper market during the week and quotations remain practically unchanged. Tissues continue in excellent request. The coarse paper market exhibits a steady tone.

Mechanical Pulp

No new developments have transpired in the ground wood market and both the imported and domestic products continue in normal demand. Prices are unchanged and reports of concessions are infrequent. Supplies on hand are generally considered sufficient to take care of immediate requirements. No. 1 Domestic ground wood is offered at from $28 to $33 a ton, f.o.b. mill, and imported moist mechanical pulp is selling from $36 to $38 a ton, ex dock.

Chemical Pulp

The condition of the chemical pulp market is strong and most domestic and foreign producers are well sold ahead. Trading in the spot market was only light during the past week and prices are somewhat easier. Imported easy bleaching sulphite is now offered at from 3.30 to 3.45 cents a pound and No. 1 strong unbleached is quoted at from 2.90 to 3.15 cents a pound, ex dock, Atlantic Ports. Other quotations remain unchanged at previously reported levels.

Old Rope and Bagging

Domestic old rope is in fair request and prices are steady with very little shading reported. Just at present the imported old rope market is rather lifeless. An active demand has developed for roofing bagging with the result that prices are firmer. The burlap situation has also improved and many bag makers appear to be engaged in filling their requirements at the present time.

Rags

A better feeling prevails in the rag market. Foreign grades are in improved request, although stocks are limited, due to the fact that importers have only been purchasing in small quantities in the expectation of lower prices abroad in the near future. Domestic rags are in moderate demand and most of the paper mills are apparently holding off for the time being. No radical changes in prices have been reported.

Waste Paper

While the waste paper dealers are encouraged by the improvement in the paper board situation, the mill demand has not increased to any extent so far. However, an improvement in the market cannot be far off, and a feeling of optimism prevails in most sections of the industry. Old kraft and white news are in better request than for some time and No. 1 mixed paper is still steady at from .47½ to .52½.

Twine

Trading in the twine market during the past week continued along routine lines. Prices remain steady, although some authorities in the industry express the view that quotations are somewhat lower than the situation calls for. The twine trade, however, is in a better condition than usual at this time of the year, and is in a good position for expansion next autumn.

Listless Period in Boston Paper Trade

BOSTON, Mass., July 19, 1926.—Boston has struck a listless period so far as business in the paper trade goes. Just now there is little real trade in sight and outside of the regular hand-to-mouth buying that has been in order for a long time, there is little doing. Hopeful signs, however, are seen in reports coming from practically all of the industrial centers where an increase in business is looked for.

A report from the State house, today, however, showed that for June both employment and payrolls fell off considerably during that month. The paper mills, of course, were included. Late reports, though, show that inventory has been taken and in many of the paper mills conditions are getting back to near normal.

The fine grade business in the trade is enjoying a fair business, the coarse division sharing in what little business there is. A slight advance in the raw stock division is reported while there is plenty doing in the paper specialty division. The paper box men have "business in sight" and report that June was a good month for them.

Nelson J. Bowker Dead

NIAGARA FALLS, N. Y., July 15, 1926.—Nelson J. Bowker, for many years general manager of the Pettebone Cataract Paper Company, died here today. He was about 60 years old.

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Miscellaneous Markets

Office of THE PAPER TRADE JOURNAL,
Wednesday, July 21, 1926.

Although manufacturers of paper makers' chemicals report an increased inquiry from the mills, the amount of new business transacted during the week was rather small, and the position of the market was a little weaker. While prices are being well maintained, on the whole, some buyers are holding back with the expectation of securing more favorable terms in the immediate near future. Shipments against contract are reported to be proceeding in a satisfactory manner, and the movement is confidently expected to continue for an indefinite period.

BLANC FIXE.—Steadiness prevails in the blanc fixe market and offerings of both the pulp and the powder are rather limited. The demand for blanc fixe, however, appears to be slackening down somewhat. The pulp is quoted at $60 a ton, in bulk, and the powder is selling at from 4¼ to 4½ cents a pound, in barrels, at works.

BLEACHING POWDER.—The bleaching powder market continues along routine lines. Contract withdrawals are being well maintained and quotations remain steady. Stocks on hand are reported to be limited. Bleaching powder is still selling at from $2 to $2.40 per 100 pounds, in large drums, at works, according to quantity.

CASEIN.—No new developments of importance transpired in the casein market during the past week. The demand for this product was light and the stocks on hand appear to be ample to take care of current requirements. Foreign casein is quoted at from 18 to 20 cents a pound, while domestic casein is selling at from 17¼ to 20 cents a pound, all in bags.

CAUSTIC SODA.—While trading in the caustic soda market during the past week was mostly routine, shipments against contract were going forward at a good pace. Although production has been large of late, consumption has been heavy, and there are no accumulations to speak of. Caustic soda is still quoted at from $3.10 to $3.15 per 100 pounds, in large drums, at works. Spot car lots are selling at from $3.20 to $3.25 per 100 pounds.

CHINA CLAY.—Demand for china clay is about normal for this time of the year. Supplies are moving into consumption on regular contract in moderate volume. Prices are holding up very well to previously quoted levels. Foreign china clay ranges from $13 to $22 a ton, in bulk, ship side, while washed domestic clay is selling at from $8 to $9 a ton, at mine, and pulverized at $10 a ton.

CHLORINE.—The position of the chlorine market remains sound. A generous inquiry for future business is reported by the manufacturers and while the market is feeling the effects of the summer lull, a decided revival is anticipated when the holiday season wanes. Chlorine is still quoted at 4 cents a pound, in tanks, or multi-unit cars, at works, on contract, while the spot price is from 4¼ to 4¾ cents a pound.

ROSIN.—Another advance has been recorded in the price of rosin. Domestic consumers are reported to be taking on stocks in good volume and the situation is very firm. At the naval stores, the grades of rosin used in the paper mills are now quoted at from $14 to $14.35 per 280 pounds, ex dock, in barrels.

SALT CAKE.—Trading in the salt cake market continued in good volume. Offerings of salt cake are still rather scarce and prices remain very firm. Shipments against contract continue to move at a satisfactory pace. Salt cake is quoted at from $18 to $20 a ton, in bulk, at works.

SODA ASH.—The tone of the soda ash market is steady and prices continue to rule firm. All signs point to a satisfactory volume of contract withdrawals for the rest of the month. Consumption is proving much heavier than in the corresponding month last year. Contract quotations, in car lots, at works, per 100 pounds, are quoted as follows: in bulk, $1.25; in bags, $1.38; and in barrels, $1.63.

STARCH.—The demand for starch continues to be excellent, and consumption is being well maintained. Shipments against contract are proceeding in a normal manner. Special paper makers' starch continues to be quoted at $3.32 per 100 pounds, in bags, and at $3.40 per 100 pounds, in barrels.

SULPHATE OF ALUMINA.—Business in the sulphate of alumina market during the past week was decidedly quiet, and consisted mostly of small orders. Contract shipments are moving in moderate volume. Commercial grades of sulphate of alumina are quoted at from $1.40 to $1.45, in bags, at works, in car lots. The iron free is offered at from $2 to $2.05 per 100 pounds, in bags, at works.

SULPHUR.—The demand for sulphur is broader than for some time, due to a number of favorable circumstances. Quotations remain steady and there have been no changes in the schedule for some time. Sulphur is still selling at from $18 to $19 a ton, in bulk, at mine, and at from $21 to $23 a ton, ship side.

TALC.—The position of the talc market is practically unchanged. Prices are holding up very well and reports of concessions are infrequent. Shipments against contract are about normal for the time of the year. The quotation on domestic talc ranges from $15 to $18 a ton, at mine. French talc is still quoted at from $18 to $22 a ton, ship side.

TORONTO MORE ACTIVE

(*Continued from page 30*)

are on a holiday motor trip to Ottawa, Montreal, and other points east.

C. H. L. Jones, of Sault Ste. Marie, Ont., manager of operations for the Spanish River Pulp and Paper Mills, was in Toronto last week calling upon friends.

W. S. Christie, superintendent of the Hinde and Dauch Paper Company's plant, Toronto, and wife, are spending a holiday in his old home town, Watertown, N. Y.

Forbes Heyland, of the Thompson and Heyland Company, Toronto, who has been looking after the pulpwood purchases of the company at Cochrane, and Hearst, Ont., for the past month has returned home.

N. B. A. Fair, of the Toronto office of the Lincoln Paper Mills, is spending a vacation with relatives and friends in Midland, Ont.

Allan Toy, of the Canada Paper Company staff, Toronto, has returned after spending an enjoyable holiday on a motor to various points throughout the province.

It is reported that the Daverin Paper Mills at Camden East, Ont, which have been closed down for some weeks, will resume operations in the near future.

W. J. Finlay, of the Strathmore Paper Company, Strathcona, Ont., was in Toronto recently, transacting business with the trade.

James R. Raines, for the past three and a half years superintendent of the Montrose division of the Provincial Paper Mills, at Thorold, Ont., has resigned and has taken a responsible position with the Lindsay Wire Weaving Company, at Cleveland, Ohio.

Hawthorne Paper Co. 50 Years Old

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., July 19, 1926.—The Hawthorne Paper Company, the first mill in Kalamazoo city proper to be devoted to the manufacture of bond, ledger and writing papers, celebrated the fiftieth anniversary of its organization on Sunday, July 11. The original promoters of the industry were the late A. H. Dwight and Robert L. Pease. The former died in May, while late in 1925 Mr. Pease became associated with Knowlton Brothers at Watertown, N. Y. H. M. Gimlin, vice president and sales director, has just resigned. F. C. Clark, secretary, continues at his post.

The concern operates a two machine mill and has a relatively small production as to tonnage. Like the Lee Paper Company at Vicksburg and the Peninsular Paper Company at Ypsilanti, it runs exclusively to high grade papers.